Sonos, Inc.'s Motion *In Limine* No. 4

EXHIBIT A

Trials@uspto.gov   Paper 33
571-272-7822   Entered: April 10, 2023

UNITED STATES PATENT AND TRADEMARK OFFICE

BEFORE THE PATENT TRIAL AND APPEAL BOARD

GOOGLE LLC,
Petitioner,

v.

SONOS, INC.,
Patent Owner.

IPR2021-01563
Patent 9,967,615 B2

Before MICHAEL R. ZECHER, TERRENCE W. McMILLIN, and
GARTH D. BAER, *Administrative Patent Judges.*

McMILLIN, *Administrative Patent Judge.*

JUDGMENT
Final Written Decision
Determining All Challenged Claims Unpatentable
35 U.S.C. § 318(a)

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I.   INTRODUCTION

A.   *Background and Summary*

On September 28, 2021, Google LLC ("Petitioner")[1] filed a Petition for *inter partes* review ("IPR") of claims 1, 2, 6–14, 18–25, and 27–29 (the "challenged claims") of U.S. Patent No. 9,967,615 B2 (Ex. 1001, "the '615 patent"). Paper 1 ("Pet."). Sonos, Inc. ("Patent Owner")[2] filed a Preliminary Response. Paper 6 ("Preliminary Response" or "Prelim. Resp."). With our authorization, Petitioner thereafter filed a Reply to Patent Owner's Preliminary Response (Paper 8) and Patent Owner filed a Sur-reply in Support of its Preliminary Response (Paper 12) to address the issue of discretionary denial under 35 U.S.C. § 314.[3] Taking into account the arguments and evidence presented in these papers, we determined that the information presented in the Petition established that there was a reasonable likelihood that Petitioner would prevail with respect to challenging at least one of claims 1, 2, 6–14, 18–25, and 27–29 of the '615 patent as unpatentable. Pursuant to 35 U.S.C. § 314, we instituted this IPR on April 12, 2022, as to all challenged claims and all grounds raised in the Petition. Paper 14 ("Institution Decision" or "Dec. on Inst.").

During trial, Patent Owner filed a Response (Paper 22, "PO Resp."), Petitioner filed a Reply to the Response (Paper 23, "Pet. Reply"), and Patent

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[1] Petitioner identifies itself, Google LLC, as the real party-in-interest to this proceeding. Pet. 76.

[2] Patent Owner identifies itself, Sonos, Inc., as the real party-in-interest to this proceeding. Paper 3, 1.

[3] Additionally, with our authorization, Patent Owner filed a Motion to Dismiss Under 35 U.S.C. § 315(a) (Paper 7, "Motion") and Petitioner filed an Opposition to Patent Owner's Motion to Dismiss (Paper 10). We denied this Motion on April 12, 2022 (Paper 13).

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Owner filed a Sur-reply to the Reply (Paper 25, "PO Sur-reply"). An oral

argument was held on January 18, 2023, and a transcript of the hearing is

included in the record. Paper 32 ("Tr.").

We have jurisdiction under 35 U.S.C. § 6. This decision is a Final

Written Decision under 35 U.S.C. § 318(a) as to the patentability of

claims 1, 2, 6–14, 18–25, and 27–29 of the '615 patent. For the reasons we

identify below, we hold that Petitioner has demonstrated by a preponderance

of the evidence that all challenged claims are unpatentable.

B.   Related Proceedings

The parties identify *Google LLC v. Sonos, Inc.*, No. 3:20-cv-06754

(N.D. Cal.) as a related proceeding in which the '615 patent has been

asserted. Pet. 76; Paper 3, 1. The Parties also identify *Sonos, Inc. v. Google*

LLC, No. 3:21-cv-07559 (N.D. Cal.), which was transferred from the

Western District of Texas (*Sonos, Inc. v. Google LLC*, No. 6:20-cv-00881

(W.D. Tex.)), as involving the '615 patent. Pet. 76; Prelim. Resp. 1 n.1.

C.   The '615 Patent

The '615 patent is titled "Networked Music Playback" and issued on

May 8, 2018. Ex. 1001, codes (45), (54). The application for the '615

patent (U.S. Patent Appl. No. 14/628,952) was filed on February 23, 2015, as

a continuation of, and claims priority to, an application (U.S. Patent Appl.

No. 13/341,237) filed on December 30, 2011 (now U.S. Patent No.

9,654,821). *Id.* at codes (21), (22), (63), 1:6–10.

The '615 patent relates to "providing music for playback via one or

more devices on a playback data network." *Id.* at 1:14–15. In particular, the

'615 patent describes connecting one or more multimedia playback devices

via a network to share music and other multimedia content among devices.

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Id. at 1:66–2:9. The '615 patent also describes facilitating music streaming from a music-playing application to one or more multimedia content playback systems and locations. *Id.* at 2:10–17, 12:8–14.

Figure 7 of the '615 patent, reproduced below, shows an embodiment using a cloud-based network to distribute content on one or more local networks of multimedia playback devices. *Id.* at 12:19–25.
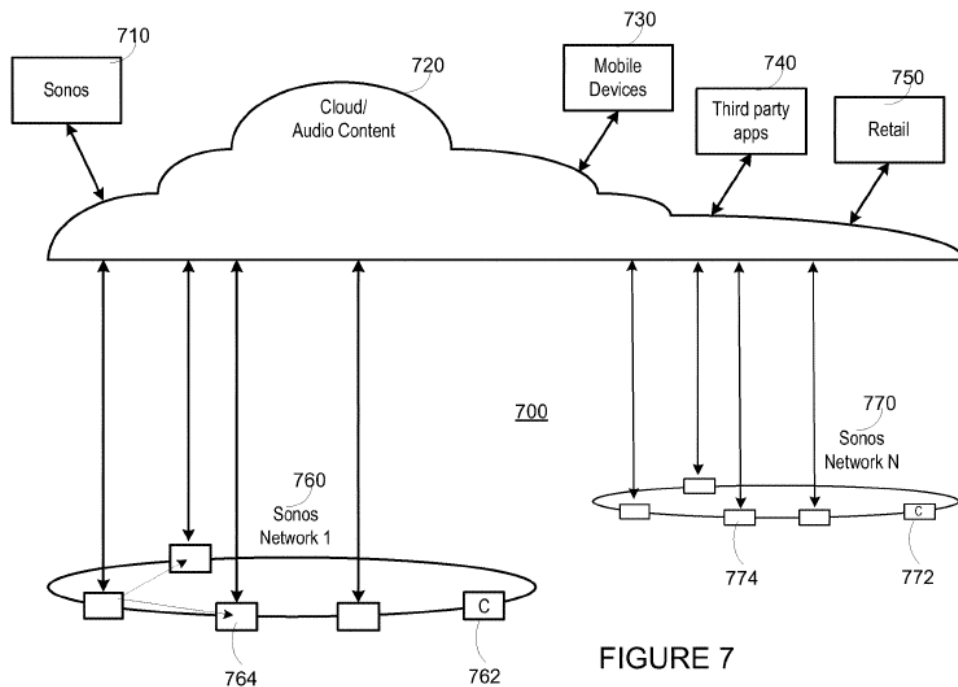

FIGURE 7

Figure 7 of the '615 patent depicts system 700 including cloud network 710, content providers 720, 730, 740, 750, and local playback networks 760, 770. *Id.* at 12:31–34. Using cloud 710, content providers 720, 730, 740, 750 provide multimedia content to controllers 762, 772 and local playback devices 764, 774 in local playback networks 760, 770. *Id.* at 12:34–43.

> For example, a user listens to a third party music application (e.g., Pandora™ Rhapsody™, Spotify™, and so on) on her smart phone while commuting. She's enjoying the current channel and, as she walks in the door to her home, selects an option to continue playing that channel on her household music playback system (e.g., Sonos™). The

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playback system picks up from the same spot on the selected channel that was on her phone and outputs that content (e.g., that song) on speakers and/or other playback devices connected to the household playback system. A uniform resource indicator (URI) (e.g., a uniform resource locator (URL)) can be passed to a playback device to fetch content from a cloud and/or other networked source, for example. A playback device, such as a zone player, can fetch content on its own without use of a controller, for example. Once the zone player has a URL (or some other identification or address) for a song and/or playlist, the zone player can run on its own to fetch the content. Songs and/or other multimedia content can be retrieved from the Internet rather than a local device (e.g., a compact disc (CD)), for example.

Id. at 12:44–63.

D.   *Challenged Claims*

Petitioner challenges claims 1, 2, 6–14, 18–25, and 27–29 of the '615 patent. Pet. 1. Of the challenged claims, claim 1 is an independent method claim, claim 13 is an independent non-transitory computer readable storage medium claim, and claim 25 is an independent apparatus claim. Ex. 1001, 17:36–18:12, 19:48–20:27, 22:5–58. Claim 1 recites:

1. A method comprising:
   causing, via a control device, a graphical interface to display a control interface including one or more transport controls to control playback by the control device;
   after connecting to a local area network via a network interface, identifying, via the control device, playback devices connected to the local area network;
   causing, via the control device, the graphical interface to display a selectable option for transferring playback from the control device;
   detecting, via the control device, a set of inputs to transfer playback from the control device to a particular playback device, wherein the set of inputs comprises: (i) a selection of the selectable option for transferring playback from the control

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device and (ii) a selection of the particular playback device from the identified playback devices connected to the local area network;

after detecting the set of inputs to transfer playback from the control device to the particular playback device, causing playback to be transferred from the control device to the particular playback device, wherein transferring playback from the control device to the particular playback device comprises:

(a) causing one or more first cloud servers to add multimedia content to a local playback queue on the particular playback device, wherein adding the multimedia content to the local playback queue comprises the one or more first cloud servers adding, to the local playback queue, one or more resource locators corresponding to respective locations of the multimedia content at one or more second cloud servers of a streaming content service;

(b) causing playback at the control device to be stopped; and

(c) modifying the one or more transport controls of the control interface to control playback by the playback device; and

causing the particular playback device to play back the multimedia content, wherein the particular playback device playing back the multimedia content comprises the particular playback device retrieving the multimedia content from one or more second cloud servers of a streaming content service and playing back the retrieved multimedia content.

Id. at 17:36–18:12.

E.   *The Asserted Grounds*

Petitioner challenges claims 1, 2, 6–14, 18–25, and 27–29 of the '615 patent based on the grounds set forth in the table below.

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Claims Challenged	35 U.S.C. §	References
1, 6–13, 18–25, 27–29	103(a)[4]	Al-Shaykh[5], Qureshey[6]
1, 6–13, 18–25, 27–29	103(a)	Al-Shaykh, Qureshey, Phillips[7]
2, 14	103(a)	Al-Shaykh, Qureshey, Ramsay[8]
2, 14	103(a)	Al-Shaykh, Qureshey, Phillips, Ramsay

Pet. 2–3. Petitioner relies on the Declaration of Dr. Harry Bims (Ex. 1003, "Bims Decl."). Patent Owner relies on the Declaration of Dr. Douglas C. Schmidt (Ex. 2018, "Schmidt Decl.").

II.   ANALYSIS

A.   Claim Construction

Claim construction in this proceeding is governed by 37 C.F.R. § 42.100(b) (2021), which provides:

> In an *inter partes* review proceeding, a claim of a patent, or a claim proposed in a motion to amend under §42.121, shall be construed using the same claim construction standard that would be used to construe the claim in a civil action under 35 U.S.C. 282(b), including construing the claim in accordance with the ordinary and customary meaning of such claim as understood by one of ordinary skill in the art and the prosecution history pertaining to the patent.

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[4] The Leahy-Smith America Invents Act ("AIA"), Pub. L. No. 112-29, 125 Stat. 284, 285–88 (2011), revised 35 U.S.C. § 103 effective March 16, 2013. Because the challenged patent claims priority to applications filed before March 16, 2013, we refer to the pre-AIA version of § 103. Our analysis, findings, and conclusions on the present record apply equally to the corresponding post-AIA version of § 103.

[5] US 2011/0131520 A1, published June 2, 2011 (Ex. 1007).

[6] US 8,050,652 B2, issued Nov. 1, 2011 (Ex. 1008).

[7] US 8,799,496 B2, issued Aug. 5, 2014 (Ex. 1006).

[8] US 8,724,600 B2, issued May 13, 2014 (Ex. 1009).

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Under the standard set forth in *Phillips v. AWH Corp.*, 415 F.3d 1303, 1312–19 (Fed. Cir. 2005) (en banc), claim terms are given their ordinary and customary meaning, as would have been understood by a person of ordinary skill in the art at the time of the invention, in light of the language of the claims, the specification, and the prosecution history of record. *See Thorner v. Sony Comput. Ent. Am. LLC*, 669 F.3d 1362, 1365–66 (Fed. Cir. 2012). There is a "heavy presumption," however, that a claim term carries its ordinary and customary meaning. *CCS Fitness, Inc. v. Brunswick Corp.*, 288 F.3d 1359, 1366 (Fed. Cir. 2002) (citation omitted). We only construe terms to the extent necessary to resolve the dispute between the parties. *See Nidec Motor Corp. v. Zhongshan Broad Ocean Motor Co.*, 868 F.3d 1013, 1017 (Fed. Cir. 2017) ("[W]e need only construe terms 'that are in controversy, and only to the extent necessary to resolve the controversy.'") (quoting *Vivid Techs., Inc. v. Am. Sci. & Eng'g, Inc.*, 200 F.3d 795, 803 (Fed. Cir. 1999)).

Petitioner relies on claim constructions previously determined by the U.S. District Court for the Western District of Texas and Patent Owner's proposed constructions for a number of terms. Pet. 12. The Petition states:

> In the related litigation, before the case was transferred, the District Court for the Western District of Texas held that the following terms that appear in the '615 patent should be construed to their plain and ordinary meanings: "multimedia," "network interface," "playback device," and "local area network." Exs. 1016-1017. Additionally, although dropped from consideration before argument and ruling, and thus not construed by the Texas district court, [Patent Owner] and the defendants agreed to construe "one or more transport controls to control playback" as "one or more user input elements, each enabling control of a respective playback-related function." Ex. 1012 at 4. Additionally, [Patent Owner] proposed construing

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"wireless communication interface" as "physical component of a device that provides a wireless interconnection with a local area network." *Id.* at 3.

[Patent Owner] also asserted the plain and ordinary meaning for the following claim terms: "first cloud servers," "second cloud servers of a streaming content service," and "playback queue." *Id.* at 4. For the purposes of this IPR, [Petitioner] adopts the constructions of the District Court for the Western District of Texas and [Patent Owner]'s proposed claim constructions for those terms not presented for construction and construed by the district court. *See* Bims [Decl.], ¶¶38-40.

Id. Petitioner argues for no express construction, and provides no support for any construction of any claim term beyond the plain and ordinary meaning, except for the alleged agreement of the parties relating to the phrases "one or more transport controls to control playback" and "wireless communication interface." Patent Owner does not address the construction of these two phrases. *See* PO Resp. 19–25 (addressing "Claim Construction"). As there does not appear to be a dispute between the parties relating to any of the terms or phrases discussed in the Petition,[9] we apply the plain and ordinary meaning to those terms and phrases, except for the two phrases for which there was an agreement otherwise. For those two phrases, we construe them as agreed between the parties in the Western District of Texas. But, even with regard to those two phrases, our decision

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[9] Patent Owner's Response includes a chart containing claim terms and meanings (largely, plain and ordinary meaning) presented by the parties in the parallel district court litigation but does not request that we do anything with this information including providing any argument that express construction of any of these terms is necessary to resolve any dispute in this proceeding. *See* PO Resp. 19. We apply the plain and ordinary meaning to the terms in this chart.

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would not be different if we applied the plain and ordinary meaning of these terms without express construction.

In its Response, Patent Owner presents arguments in support of applying the plain and ordinary meaning to the claim phrases "transferring playback" and "local playback queue." *See* PO Resp. 20–25. With regard to "transferring playback," the Response states:

> [A] POSA [person of skill in the art] would ***not*** have equated the claimed function of the control device "transferring playback" to a playback device with the prior art's function of a control device ***merely*** "transferring media content" (e.g., transmitting or sourcing media data) to a playback device (without more). [Ex. 2018] ¶75. Rather, a POSA would have understood from the plain claim language that the control device must be capable of being in a playback (or rendering) state when it "detect[s] a set of inputs to transfer playback" and after such detecting, "caus[e] playback to be transferred from the control device to the particular playback device," which includes, *inter alia,* "causing playback at the control device to be stopped" and "causing the particular playback device to playback the multimedia content." *Id.*

Id. at 21. Petitioner does not dispute Patent Owner's meaning for "transferring playback." *See* Tr. 10:15–16 ("It is merely referring to transferring playback, or rendering from one device to another."). And, Petitioner contends that applying Patent Owner's meaning to "transferring playback," Al-Shaykh discloses this function as recited. *See, e.g.*, Pet. Reply 6 ("[Patent Owner] defines 'transferring playback' as transferring the function of rendering multimedia content . . . . This is what Al-Shaykh does.").

With regard to "local playback queue," the Response states:

> [A] POSA would have understood that, in the context of the '615 Patent, the plain and ordinary meaning of a "playback

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> queue" is a "container" that can hold multimedia (e.g., a resource locator corresponding to a particular music track) for playback – or more precisely, hold multimedia that a given device *is set to play*. [Ex. 2018] ¶81. A POSA would therefore have understood that the plain and ordinary meaning of the claimed "local playback queue" is a data construct (e.g., "container") on the "playback device" that can contain one or more resource locators, each of which corresponds to multimedia content that the "playback device" is to playback. *Id.*

PO Resp. 23.[10] Petitioner does not appear to dispute Patent Owner's meaning for "playback queue." *See* Tr. 8:3–22. And, in the Reply, Petitioner argues that Qureshey discloses a "playback queue" under any meaning discussed in the Patent Owner's Response. *See* Pet. Reply 8–10.

As there does not appear to be a dispute between the parties that the plain and ordinary meanings of these phrases in the context of the '615 patent should be applied, for claim construction purposes, we adopt the plain and ordinary meanings set forth by Patent Owner for "transferring playback" and "local playback queue." To the extent necessary, we further discuss these phrases and the contentions regarding their meanings as it pertains to the relevant teachings of the cited prior art contested by the parties in our analysis below.

We further determine that no additional express construction is necessary to resolve any controversy in this proceeding.

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[10] As shown in the chart provided by Patent Owner, in the parallel district court litigation, Patent Owner proposed giving "playback queue" its plain and ordinary meaning without further specification of that meaning, even though Patent Owner did specify the plain and ordinary meaning of most terms in the chart to which Patent Owner applied a plain and ordinary meaning. *See* PO Resp. 19.

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B.   Legal Standards

A patent claim is unpatentable as obvious if the differences between the claimed subject matter and the prior art are such that the subject matter, as a whole, "would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains." *KSR Int'l Co. v. Teleflex Inc.*, 550 U.S. 398, 406 (2007). The question of obviousness is resolved on the basis of underlying factual determinations including: we (1) the scope and content of the prior art; (2) any differences between the claimed subject matter and the prior art; (3) the level of ordinary skill in the art; and (4) when in evidence, objective evidence of non-obviousness.[11] *Graham v. John Deere Co.*, 383 U.S. 1, 17–18 (1966).

"In an IPR, the petitioner has the burden from the onset to show with particularity why the patent it challenges is unpatentable." *Harmonic Inc. v. Avid Tech., Inc.*, 815 F.3d 1356, 1363 (Fed. Cir. 2016) (citing 35 U.S.C. § 312(a)(3) (requiring IPR petitions to identify "with particularity . . . the evidence that supports the grounds for the challenge to each claim")). Petitioners cannot satisfy their burden of proving obviousness by employing "mere conclusory statements." *In re Magnum Oil Tools Int'l, Ltd.*, 829 F.3d 1364, 1380 (Fed. Cir. 2016).

C.   Level of Ordinary Skill in the Art

With regard to the level of ordinary skill in the art, Petitioner contends:

> A POSITA [person of ordinary skill in the art] would have had a bachelor's degree in physics, mechanical

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[11] The parties have not asserted or otherwise directed our attention to any objective evidence of nonobviousness.

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> engineering, electrical engineering, or audio engineering (or an
> equivalent degree), and three years of experience designing or
> implementing networked wireless systems related to streaming
> media over the Internet. Bims [Decl.], ¶¶20–23. With more
> education, for example, postgraduate degrees and/or study, less
> experience is needed to attain an ordinary level of skill in the
> art. Similarly, more experience can substitute for formal
> education. *Id.*

Pet. 11. Petitioner's proposal is consistent with the technology described in
the Specification and the cited prior art. In the Institution Decision, we
adopted Petitioner's proposed level of skill in the art. Dec. on Inst. 17–18.
In the Response, Patent Owner agrees with our preliminary determination to
adopt Petitioner's proposed level of ordinary skill in the art "[f]or purposes
of this IPR." PO Resp. 18. We, therefore, apply Petitioner's proposed level
of ordinary skill in the art in our obviousness analysis below.

D. Cited References

1. Al-Shaykh (Ex. 1007)

Al-Shaykh is titled "System and Method for Transferring Media
Content from a Mobile Device to a Home Network." Ex. 1007, code (54).
Al-Shaykh "relates to a system and a method which enable a media
application on the mobile device to share media content with rendering
devices in the home network." *Id.* ¶ 2.

Figure 1 of Al-Shaykh, reproduced below, "illustrates a system for
transferring media content from a mobile device to a home network." *Id.*
¶ 68.

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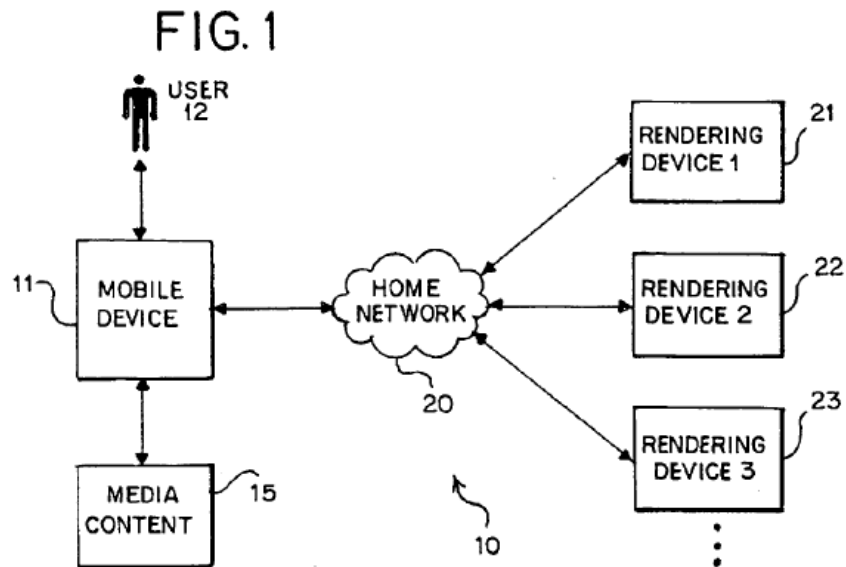Patent 9,967,615 B2

FIG. 1

Figure 1 of Al-Shaykh depicts system 10 for transferring media content 15 from mobile device 11 to rendering devices 21, 22, 23 on home network 20. *Id.* ¶ 78. "[M]obile device 11 may have a display screen capable of displaying user interface elements and/or visual media content." *Id.* Rendering devices 21, 22, 23 "may be any rendering device capable of rendering the media content received using the home network 20 as known to one skilled in the art." *Id.* ¶ 81. Mobile device 11 uses a media application to access media content 15 stored locally or remotely provided via the Internet. *Id.* ¶¶ 82–83.

Figure 2, reproduced below, "illustrates a user interface of a media application having a set of controls and indications in an embodiment of the present invention." *Id.* ¶ 69.

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FIG. 2

AVAILABLE MEDIA OBJECTS 36
MEDIA USE AREA 40
MEDIA CONTROLS 42
MEDIA-1
MEDIA-2
MEDIA-3
MEDIA-4
MEDIA-5
SEND
SELECTED MEDIA OBJECT 37
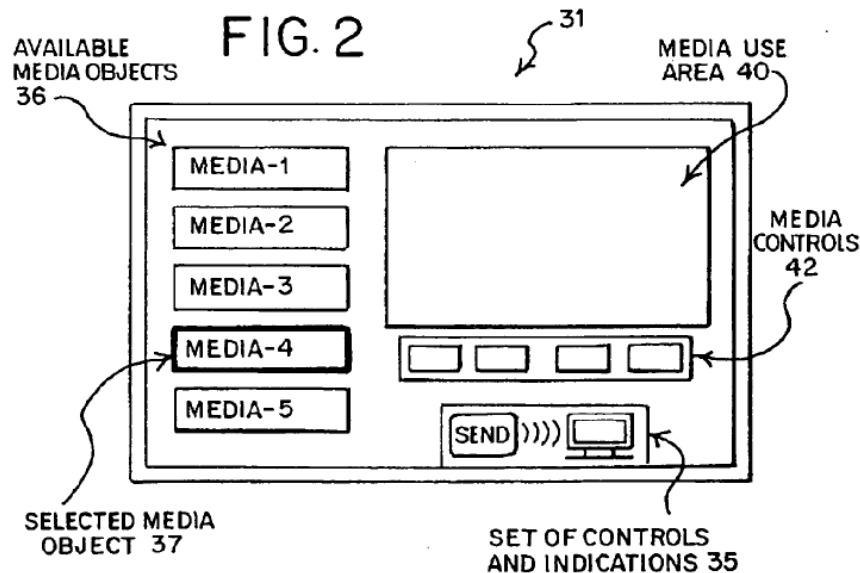SET OF CONTROLS AND INDICATIONS 35

Figure 2 of Al-Shaykh depicts user interface 31 for the media application of mobile device 11. *Id.* ¶ 85. User interface 31 includes media controls 42 for controlling media-related tasks (*id.* ¶ 88) and set of controls and indications 35 for enabling the user to transfer media content to rendering devices 21, 22, 23 (*id.* ¶ 89).

> [M]obile device 11 may access and/or obtain the media content from a remote content service using a 3G carrier network for use in a media application on the mobile device 11. Then, the mobile device 11 may relay the media content to the target rendering device using the home network 20. In this case, the media content from the remote content service may flow through the mobile device 11 if the transfer of the media content is enabled using the set of controls and indications 35.

Id. ¶ 95.

Al-Shaykh published on June 2, 2011, based on an application filed on November 29, 2010. Ex. 1007, codes (22), (43). As noted above, the earliest priority date claimed for the '615 patent is December 30, 2011. Ex. 1001, code (63). Al-Shaykh is prior art to the '615 patent.

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2. Qureshey (Ex. 1008)

Qureshey is titled "Method and Device for an Internet Radio Capable of Obtaining Playlist Content From a Content Server." Ex. 1008, code (54). Qureshey relates to "management and distribution of audio files over a computer network such as the Internet." *Id.* at 1:22–24.

Figure 11 of Qureshey, reproduced below, "is a perspective view of one embodiment of the computing environment of a network-enabled audio device configuration." *Id.* at 5:51–53.
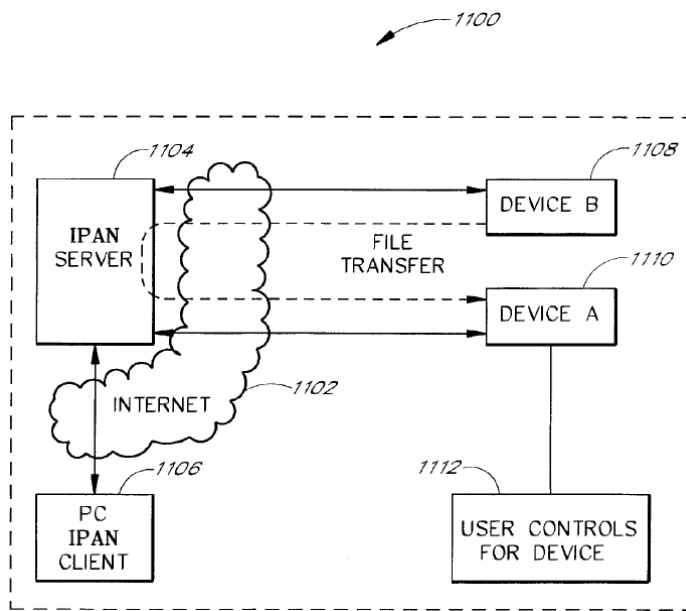

FIG. 11

Figure 11 of Qureshey depicts Internet Personal Audio Network (IPAN) 1100 including network 1102 (e.g., Internet), IPAN server 1104, personal computer (PC) IPAN client 1106, network-enabled audio device A 1110 with user controls 1112, and network-enabled audio device B 1108. *Id.* at 16:56–62. IPAN server 1104 maintains playlists, which are lists of audio files and associated URLs specifying where the audio files can be retrieved. *Id.* at 17:4–6, 21:62–65. Device A 1110 connects to IPAN server 1104,

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which downloads a playlist to device A 1110. *Id.* at 16:67–17:2. Using a

Playlist Manager audio player window (not shown), a user can assign a

playlist to an audio device. *Id.* at 24:44–53, 28:11–16.

Qureshey issued on November 1, 2011, based on an application filed

November 27, 2006, and claims priority to applications filed on March 12,

2001, and June 12, 1998. Ex. 1008, codes (22), (45), (63). As noted above,

the earliest priority date claimed for the '615 patent is December 30, 2011.

Ex. 1001, code (63). Qureshey is prior art to the '615 patent.

3.   *Phillips (Ex. 1006)*

Phillips is titled "System and Method for Video Display Transfer

Between Video Playback Devices." Ex. 1006, code (54). Phillips "relates to

transferring display of video content from one device to another." *Id.* at

1:14–15.

Figure 1 of Phillips, reproduced below, "illustrates a system for

transferring display of video content between a mobile device and a renderer

located proximate to the mobile device according to one embodiment of the

present disclosure." *Id.* at 2:8–11.
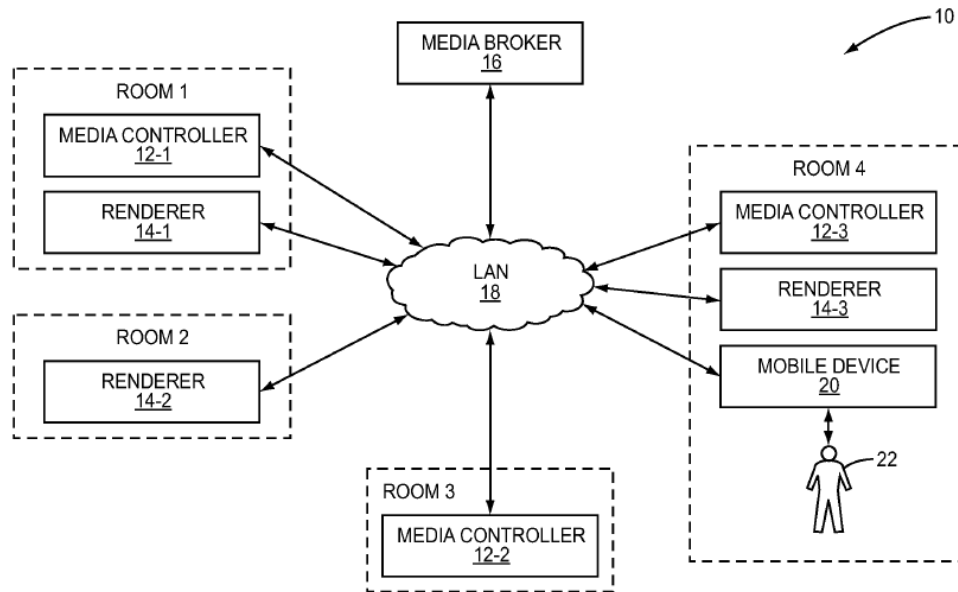
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FIG. 1

Figure 1 of Phillips depicts system 10 including media controllers 12, renderers 14, and media broker 16 connected via Local Area Network (LAN) 18. *Id.* at 2:63–66. Media controllers 12 are sources of video content that are stored locally or accessed remotely from Internet-based streaming video services. *Id.* at 3:18–25. Renderers 14 are devices that provide playback of content from media controllers 12. *Id.* at 3:43–44. Media broker 16 manages transfer of video between mobile device 20 and renderers 14. *Id.* at 4:5–9. User 22 may initiate a transfer of video content using a graphical user interface on mobile device 20. *Id.* at 5:60–66.

Phillips is based on an application filed on July 19, 2010. Ex. 1006, code (22). As noted above, the earliest priority date claimed for the '615 patent is December 30, 2011. Ex. 1001, code (63). Phillips is prior art to the '615 patent.

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4.   *Ramsay (Ex. 1009)*

Ramsay is titled "Systems and Methods for Providing a Media Playback in a Networked Environment." Ex. 1009, code (54). Ramsay discloses a wireless web-enabled portable device interfacing with one or more networked media playback devices without the need for specialized software on the portable device. *Id.* at 1:9–13.

Figure 1 of Ramsay, reproduced below, "shows a networked media system according to one embodiment." *Id.* at 3:34–35.
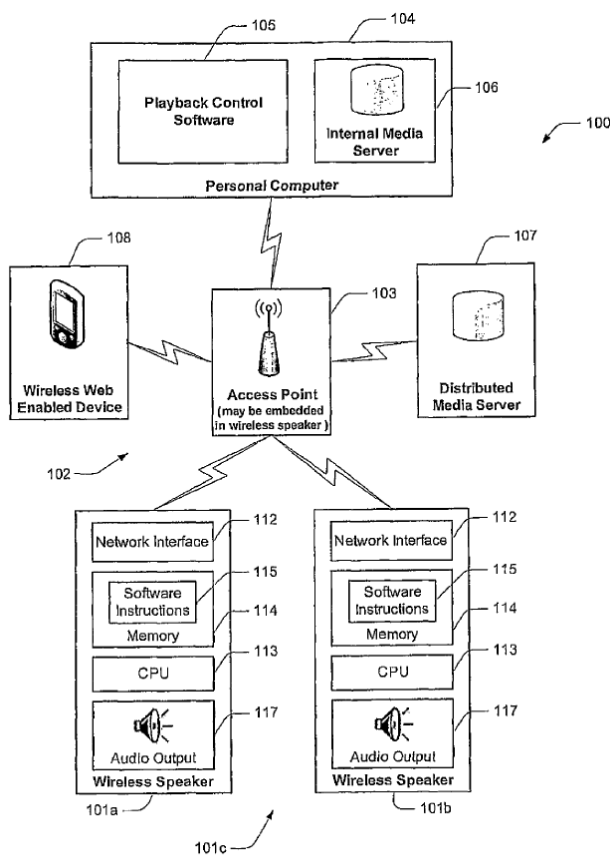

FIG. 1

Figure 1 of Ramsay depicts digital media playback system 100 including wireless speakers 101*a*, 101*b*, which are connected to wireless network 102 via access point 103 and controllable individually or together as speaker set

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101*c*. *Id.* at 4:59–66. Wireless web-enabled device 108 (e.g., Apple iPhone) is used to control individual wireless speakers 101*a*, 101*b* or speaker set 101*c*. *Id.* at 5:25–30.

Ramsay is based on an application filed on January 7, 2009. Ex. 1009, code (22). As noted above, the earliest priority date claimed for the '615 patent is December 30, 2011. Ex. 1001, code (63). Ramsay is prior art to the '615 patent.

E.   Obviousness of Claims 1, 6–13, 18–25, and 27–29

Petitioner contends that claims 1, 6–13, 18–25, and 27–29 of the '615 patent are unpatentable as obvious over the combined teachings of Al-Shaykh and Qureshey (Ground I) and over the combined teachings of Al-Shaykh, Qureshey, and Phillips (Ground II). Pet. 2, 13–57. The Petition states:

> Al-Shaykh discloses the base media playback system including a mobile control device with a GUI [graphical user interface] that enables a user to transfer playback to a rendering device and functionality to allow the rendering device to retrieve content for playback from a remote source. Qureshey discloses media playback systems with servers that provide different functionality including a first set of at least one server that adds information to the playback device that identifies the location of multimedia content to be played back and a second set of at least one server that is associated with a content service and stores the content to be played back. Lastly, to the extent Patent Owner argues that Ground I does not disclose ["causing playback at the control device to be stopped"], Al-Shaykh, Qureshey, and Phillips (Ground II) also disclose this element.

Id. at 13. In its Response, Patent Owner contends that "each proposed combination . . . misses key claim limitations" and the "Petition and the opinions of its expert, Dr. Bims, are also fraught with impermissible

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hindsight bias." PO Resp. 1. Our limitation-by-limitation analysis of these

challenges to the claims of the '615 patent and our discussion of the

arguments and evidence presented by the parties is set forth below.

1.   Independent Claim 1[12]

> *A method comprising:*
> *causing, via a control device, a graphical interface to display a*
> *control interface including one or more transport controls to*
> *control playback[13] by the control device;* (referred to by the
> parties as limitation or element 1-a (*see* Pet. 17; PO Resp.
> 18))

Petitioner relies on Al-Shaykh as teaching all the elements of the

preamble and this limitation. Pet. 17–19 (citing Ex. 1003 (Bims Decl.) ¶¶

79–80; Ex. 1007 ¶¶ 78, 85–88, 92, Figs. 1, 2, 12).[14] Petitioner contends that

"Al-Shaykh discloses a 'mobile device' with a 'user interface 31' that

includes various components, including a media controls interface area." *Id.*

at 18. In cited paragraph 78, Al-Shaykh teaches that "[t]he mobile device 11

may have a display screen capable of displaying user interface elements

and/or visual media content." Ex. 1007 ¶ 78. Petitioner also contends that

"the media controls interface area includes 'media controls 42,' which are

---

[12] We adopt the parsing of claim 1 used by the parties. *See* Pet. 17; PO
Resp. 18.

[13] As indicated *supra*, Petitioner and Patent Owner agreed in the parallel
district court litigation to construe "one or more transport controls to control
playback" as "one or more user input elements, each enabling control of a
respective playback-related function." *See supra* Section II.B. (Claim
Construction).

[14] In the Petition, certain text is colored to correspond to colored annotations
added to the figures. *See, e.g.*, Pet. 17 (colored text), 19 (colored
annotations added to Figures 1 and 2). In quoting the passages in the
Petition with colored text, all text coloration outside of the figures in the
Petition has been removed.

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elements used to 'control rendering of music files on the mobile device 11.'"

Pet. 18 (citing Ex. 1007 ¶¶ 78, 88, 92). In cited paragraph 88, Al-Shaykh

teaches that, "[t]he media controls 42 may enable the user 12 to control

media-related tasks, such as, for example, creation, discovery, selection,

organization, management, manipulation and/or rendering of the media

content 15." Ex. 1007 ¶ 88. The Petition includes an annotated, combined

version of Figures 1 and 2 of Al-Shaykh, reproduced below. Pet. 19.
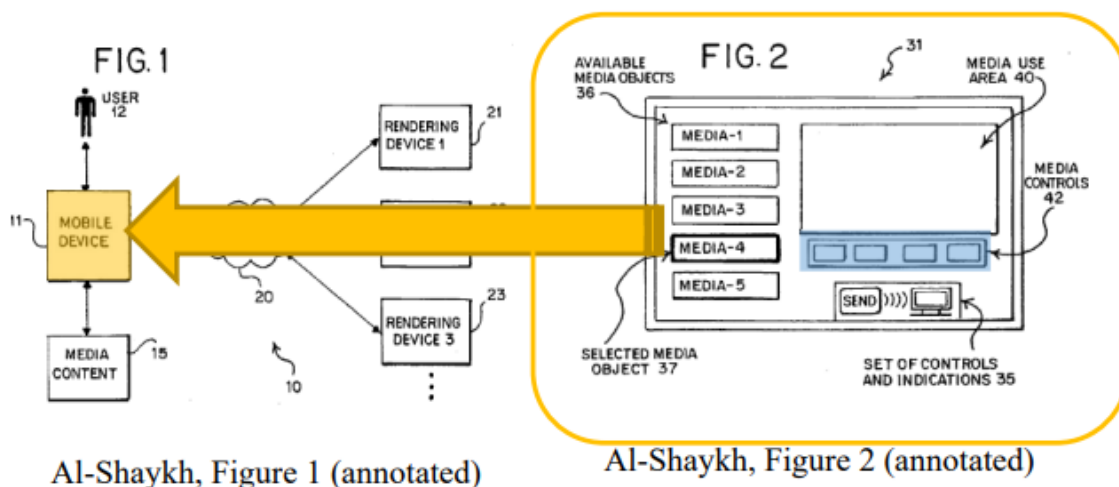
Al-Shaykh, Figure 1 (annotated)   Al-Shaykh, Figure 2 (annotated)

Id. Figure 1 depicts "a system for transferring media content from a mobile

device to a home network," and Figure 2 depicts "a user interface of a media

application having a set of controls and indications." Ex. 1007 ¶¶ 68–69.

Patent Owner does not dispute the showing in the Petition as to the

preamble and this limitation. *See generally* PO Resp.

The cited passages and figures of Al-Shaykh support Petitioner's

argument that all the elements of the preamble and this limitation are taught

by the cited art. And, the showing in the Petition is undisputed. We find

that all the elements of the preamble and this limitation are taught by Al-

Shaykh.

> *after connecting to a local area network via a network*
> *interface, identifying, via the control device, playback*

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> *devices connected to the local area network;* (referred to by
> the parties as limitation or element 1-b (*see* Pet. 17; PO Resp.
> 18))

Petitioner relies on Al-Shaykh as teaching all the elements of this

limitation. Pet. 19–22 (citing Ex. 1003 (Bims Decl.) ¶¶ 81–85; Ex. 1007

¶¶ 4, 5, 34, 77, 78, 80–82, 85, 94, 112, 133, 153, Figs. 1, 6). Petitioner

contends:

> Al-Shaykh's mobile device connects to a home network
> 20, such as a "residential local area network," in order to
> "communicate with one or more available rendering devices."
> *Id.* at 19–20 (citing Ex. 1007 ¶ 78, Fig. 1).

> * * *

> Al-Shaykh discloses communicating using . . . local area
> network protocols for the home network, so the components of
> Al-Shaykh's mobile devices providing the interface to those
> networks are network interfaces. *Id.* at 20 (citing Ex. 1007
> ¶¶ 4, 5, 77, 78, 80, 82, 94).

> * * *

> Al-Shaykh's rendering devices include "televisions[s], …
> stereo[s], … a gaming console[s], a personal computer[s], a
> laptop PC[s], [] netbook PC[s], and/or the like," and, thus, are
> playback devices because each of these devices are configured
> to playback content. *Id.* at 21 (citing Ex. 1007, ¶ 81, Fig. 1).

And, Petitioner provides an annotated version of Figure 1 of Al-Shaykh,

reproduced below.

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FIG. 1
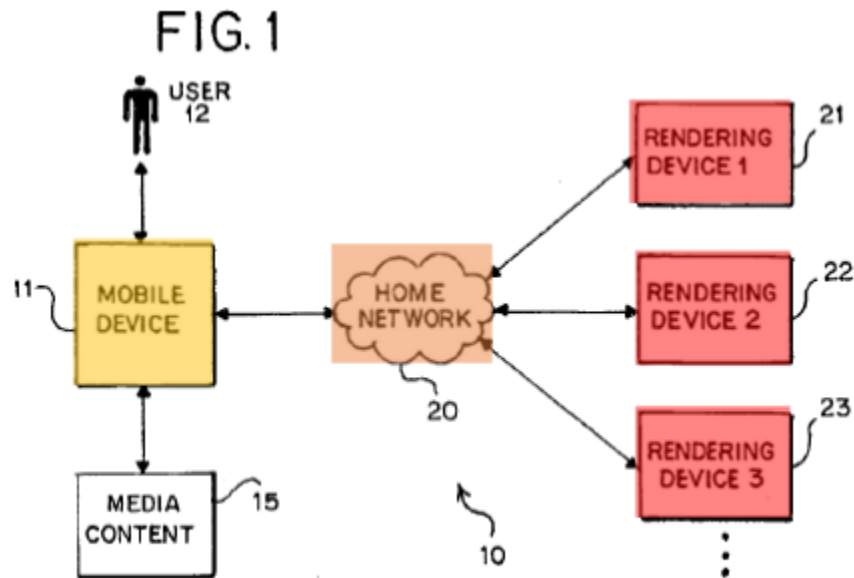
Al-Shaykh, Figure 1 (annotated)

Id. According to Petitioner, the annotated version of Figure 1 depicts that,
"[a]fter connecting to the local area network [home network 20], the mobile
device [11] communicates with 'rendering devices 21, 22, 23.'" *Id.* And,
the Petition includes an annotated version of combined Figures 1 and 6 of
Al-Shaykh, reproduced below. *Id.* at 22.

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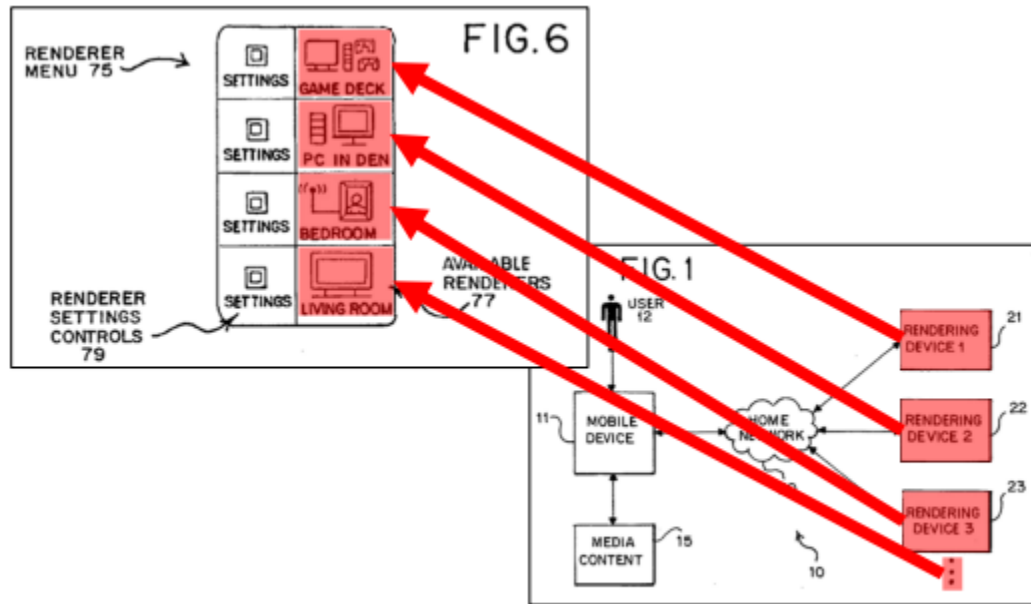
Al-Shaykh, Figure 6 (annotated with elements from Figure 1)

Id. Figure 1 depicts, "a system for transferring media content from a mobile device to a home network," and Figure 6 depicts, "a renderer menu." Ex. 1007 ¶¶ 68, 71.
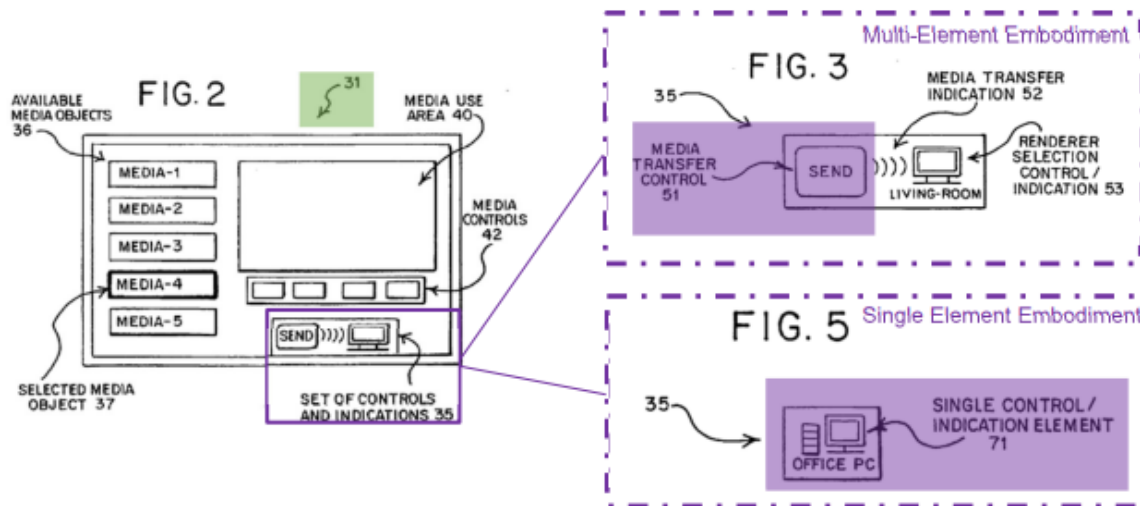
Patent Owner does not dispute the showing in the Petition as to this limitation. *See generally* PO Resp.

The cited passages and figures of Al-Shaykh support Petitioner's argument that all the elements of this limitation are taught by the cited art. And, the showing in the Petition is undisputed. We find that all the elements of this limitation are taught by Al-Shaykh.

> *causing, via the control device, the graphical interface to display a selectable option for transferring playback from the control device;* (referred to by the parties as limitation or element 1-c (*see* Pet. 17; PO Resp. 18))

Petitioner relies on Al-Shaykh as teaching all the elements of this limitation. Pet. 22–24 (citing Ex. 1003 (Bims Decl.) ¶¶ 86–88; Ex. 1007 ¶¶ 89, 100, 115, 120, Figs. 2–5). Petitioner contends: "[t]he 'user interface

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31' of Al-Shaykh's mobile device displays a 'set of controls and indications
35 [that] enable the user 12 to enable and/or disable transfer of the media
content 15' to a rendering device." *Id.* at 22–23 (citing Ex. 1007 ¶ 89,
Fig. 2) (alteration in original).   Petitioner provides annotated versions of
Figures 2, 3, and 5 of Al-Shaykh, reproduced below. *Id.* at 24.

Al-Shaykh, Figures 2, 3, and 5 (annotated)

Id.   Annotated Figures 2, 3, and 5 depict "the mobile device displays media
transfer control 51 and control/indication element 71 as selectable options
for transferring playback from the control device (i.e., the mobile device) to
a rendering device." *Id.* at 23 (citing Ex. 1003 (Bims Decl.) ¶¶ 86-88). The
cited passages and figures of Al-Shaykh support Petitioner's argument that
all the elements of this limitation are taught by the cited art.

Patent Owner argues that Al-Shaykh fails to teach the "transferring
playback" element of this limitation. PO Resp. 31–35. As this argument
relates to this limitation and the next two limitations in claim 1 (referred to
by the parties as limitations 1-c, 1-d, and 1-e), we discuss Patent Owner's
argument below after considering the showing in the Petition as to these
three limitations.

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> *detecting, via the control device, a set of inputs to transfer*
> *playback from the control device to a particular playback*
> *device, wherein the set of inputs comprises: (i) a selection of*
> *the selectable option for transferring playback from the*
> *control device and (ii) a selection of the particular playback*
> *device from the identified playback devices connected to the*
> *local area network;* (referred to by the parties as limitation or
> element 1-d (*see* Pet. 17; PO Resp. 18))

Petitioner relies on Al-Shaykh as teaching all the elements of this

limitation. Pet. 24–26 (citing Ex. 1003 (Bims Decl.) ¶¶ 89–92; Ex. 1007

¶¶ 31, 36, 78, 85, 89, 99, 100, 106, 114, 115, 117, 119–121, 133–139,

Figs. 2–6). Petitioner contends:

> Al-Shaykh discloses . . . a user selects the selectable option
> (i.e., media transfer control 51 or control/indication element 71)
> to "enable and/or disable transfer of the media content 15' to a
> rendering device. *Id.* at 25 (citing Ex. 1003 ¶ 90).
>
> <div align="center">* * *</div>
>
> After the media transfer control 51 or control/indication
> element 71 is selected, the mobile device can display a renderer
> menu 75 with "a list 77 of available rendering devices" for a
> user to select from. *Id.* (citing Ex. 1003 ¶ 91; Ex. 1007 ¶¶ 106,
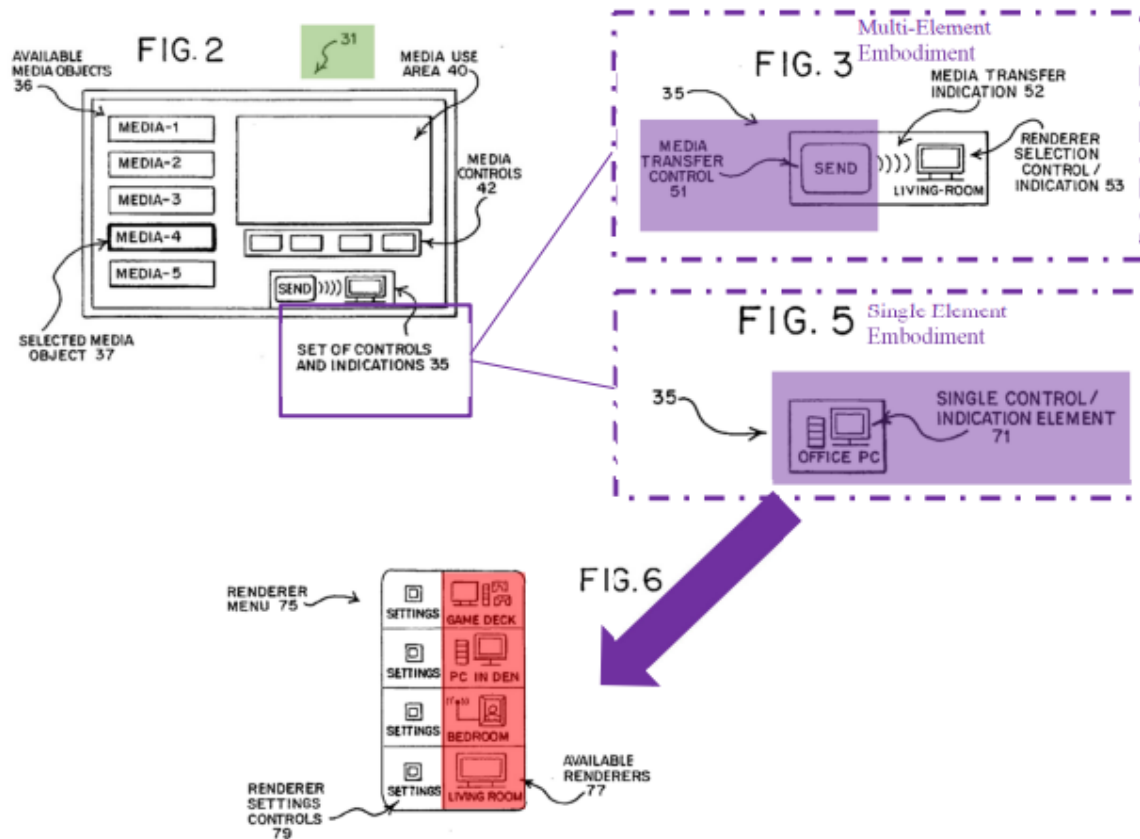> 117, 120, 121, 133).
>
> <div align="center">* * *</div>
>
> The list enables a user to "select" a particular rendering device
> from the list of available rendering devices. *Id.* (citing
> Ex. 1007 ¶ 133).

And, Petitioner provides annotated versions of Figures 2, 3, 5, and 6 of Al-

Shaykh, reproduced below. *Id.* at 26.

<div align="center">27</div>

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FIG. 2 / FIG. 3 Multi-Element Embodiment / FIG. 5 Single Element Embodiment / FIG. 6

Id. Petitioner contends that annotated Figures 2, 3, 5, and 6 depict, "in Al-Shaykh's system, a mobile device detects user inputs to transfer playback from the mobile device to a particular rendering device when the user selects the media transfer control 51 or control/indication element 71 followed by a second selection of a particular rendering device from the renderer menu." *Id.* (citing Ex. 1003 ¶ 92). The cited passages and figures of Al-Shaykh support Petitioner's argument that all the elements of this limitation are taught by the cited art.

As noted above, Patent Owner argues that Al-Shaykh fails to teach the "transfer playback/transferring playback" element of this limitation. PO Resp. 31–35. As this argument relates to this limitation, the preceding limitation, and the next limitation in claim 1 (referred to by the parties as

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limitations 1-c, 1-d, and 1-e), we discuss Patent Owner's argument below after considering the showing in the Petition as to these three limitations.

> *after detecting the set of inputs to transfer playback from the control device to the particular playback device, causing playback to be transferred from the control device to the particular playback device, wherein transferring playback from the control device to the particular playback device comprises:* (referred to by the parties as limitation or element 1-e (*see* Pet. 17; PO Resp. 18))

Petitioner relies on Al-Shaykh as teaching all the elements of this limitation. Pet. 27 (citing Ex. 1003 (Bims Decl.) ¶¶ 93–94; Ex. 1007 ¶¶ 89, 92, 130). Petitioner contends that Al-Shaykh "discloses that, after detecting the set of inputs, the mobile device causes playback to transfer to the target rendering device." *Id.* (citing Ex. 1007 ¶¶ 89, 92, 130). The cited passages and figures of Al-Shaykh support Petitioner's argument that all the elements of this limitation are taught by the cited art.

As noted above, Patent Owner argues that Al-Shaykh fails to teach the "transfer playback/transferring playback" element of this limitation. PO Resp. 31–35. This argument relates to this limitation and the preceding two limitations in claim 1 (referred to by the parties as limitations 1-c, 1-d, and 1-e). Specifically, Patent Owner contends, "Al-Shaykh discloses techniques 'for **transferring _media content_** from a mobile device to a home network' (Ex. 1007, ¶14), which does not amount to 'transferring **playback**' of 'multimedia content' (i.e., transferring the function of **rendering** of the 'multimedia content'), as required by claim 1." *Id.* at 32. However, the passages in Al-Shaykh cited in the Petition make clear that the function of rendering is being transferred. Cited paragraph 92 of Al-Shaykh (Pet. 27) states:

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> The user 12 may use the set of controls and indications 35 to enable transfer of the media content 15 from the music player application to a target rendering device of the available rendering devices, such as, for example, the rendering devices 21,22,23. As a result, music files and/or play lists selected, used and/or played in the music player application may ***transfer to the target rendering device for rendering***. The user 12 may use the media controls 42 of the user interface 31 of the music player application to identify, organize, arrange, and/or ***play*** additional music files. As a result, the additional music files may ***transfer from the music player application to the target rendering device for rendering***. . . . The media controls 42 may control ***the rendering of the music files on the target rendering device*** if the transfer of the media content 15 to the target rendering device is enabled using the set of controls and indications 35.

Ex1007 ¶ 92 (emphasis added). Cited paragraph 130 of Al-Shaykh (Pet. 27) states:

> The representation of the target rendering device may flash, may pulsate, may vibrate, may change colors, may move and/or the like to indicate that the media content 15 is transferring to and/or ***rendering on the target rendering device***. For example, the representation of a stereo device may be animated to depict musical notes emanating from the speakers to indicate that the media content 15 is transferring to and/or ***rendering on the stereo device***.

Ex. 1007 ¶ 130 (emphasis added). Patent Owner's argument is also contradicted by the claims of Al-Shaykh. For example, claim 1 of Al-Shaykh recites:

> 1. A method for transferring media content from a mobile device to a home network wherein the mobile device has a user interface and further wherein the home network has rendering devices, the method comprising the steps of:
> displaying a media transfer control, a media transfer indication and a renderer selection control/indication concurrently in the

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> user interface of the mobile device during execution of a
> media application by the mobile device;
>
> identifying first media content using the media application;
>
> identifying a first target rendering device of the rendering
> devices in the home network wherein the renderer selection
> control/indication identifies the first target rendering device
> to a user of the mobile device;
>
> accepting user input on the user interface of the mobile device
> which selects the media transfer control;
>
> ***rendering the first media content on the first target rendering
> device in response to selection of the media transfer
> control***; and
>
> indicating to the user of the mobile device that ***the first target
> rendering device is rendering the first media*** content
> wherein the media transfer indication indicates to the user of
> the mobile device that ***the first target rendering device is
> rendering the first media content***.

Ex. 1007, claim 1 (emphasis added); *see also id.*, claim 17. Thus, Al-Shaykh teaches that it is not "***merely*** transferring content from one device to another" as argued by Patent Owner (PO Resp. 32), but makes clear that it is actually transferring the function of rendering the content. Patent Owner fails to consider (or discuss and distinguish) these passages in Al-Shaykh in making this argument. *See id.* at 31–35.

Patent Owner also argues "Al-Shaykh does not suggest that the 'mobile device' is even in a playback state when it provides the instruction, much less suggest that the 'mobile device' is capable of causing the 'target rendering device' to playback 'media content' being rendered at the 'mobile device' at the time of transfer." PO Resp. 34 (citing Ex. 2018 ¶ 160). Instead, Patent Owner asserts that Al-Shaykh teaches away from a control device "transferring playback" to a playback device because "Al-Shaykh expressly discloses that a prerequisite to 'transfer media content' to a

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'rendering device' is that the mobile device's 'internal state' must ***not*** 'be set

to 'PLAY[.]'" *Id.* (citing Ex. 1007 ¶132). This argument is based upon an

incorrect interpretation of paragraph 132 of Al-Shaykh, which states:

> In an embodiment, the media application may change a
> state of the media application. The media application may
> cause one or more of the media controls 42 to be invoked in
> response to user input, which selects and/or invokes the one or
> more of the media controls 42 in the set of controls and
> indications 35. For example, the media application may have
> an internal state for media playback on the mobile device 11,
> and/or the internal state may be set to "PLAY" to indicate that
> media content is playing on the mobile device 11 or set to
> "PAUSE" to indicate that the media playback is paused on the
> mobile device 11. The user 12 may enable transfer of the
> media content to a target rendering device by invoking the
> media transfer control 51, the media transfer control/indication
> 61 and/or the single control/indication element 71 when the
> media application has the internal state set to "PAUSE." In
> response, the media application may change the internal state
> from "PAUSE" to "PLAY" and/or may take other actions
> associated with selection and/or invocation of a "play" control
> in the media controls 42. As a result, the media application
> may begin and/or may resume rendering of the media content
> on the mobile device 11 substantially simultaneously with the
> transfer to and/or the rendering of the media content on the
> target rendering device. In a similar fashion, the media
> application may change the internal state from "PLAY" to
> "PAUSE" in response to the user 12 disabling the transfer of the
> media content to the target rendering device by invoking the
> media transfer control 51, the media transfer control/indication
> 61 and/or the single control/indication element 71.

Ex. 1007 ¶ 132. This paragraph states the exact opposite of what Patent

Owner says it states. Paragraph 132 of Al-Shaykh addresses how the

"PLAY/PAUSE" state of the media application may be changed when

invoking the media transfer control. If the media application of the mobile

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device is set to "PAUSE" when the user invokes the media transfer control

to transfer the media content to a target rendering device, the state is

changed from "PAUSE" to "PLAY." If the state is set to "PLAY" and the

media content is playing on the mobile device, the state is not changed.

Stated differently, this paragraph teaches that, when the user invokes the

media transfer control, the mobile device is set to "PLAY" and the mobile

device continues or begins rendering the media content and then transfers

the media content to the target rendering device where it continues to be

rendered as set forth in Al-Shaykh. We, therefore, do not agree with Patent

Owner's arguments relating to this limitation.

Taking into consideration and weighing all the related arguments and

evidence, we find that all the elements of this limitation are taught by Al-

Shaykh.

> *causing one or more first cloud servers to add multimedia content to a local playback queue on the particular playback device, wherein adding the multimedia[15] content to the local playback queue comprises the one or more first cloud servers adding, to the local playback queue, one or more resource locators corresponding to respective locations of the multimedia content at one or more second cloud servers of a streaming content service;* (referred to by the parties as limitation or element 1-f (*see* Pet. 17; PO Resp. 18))

Petitioner relies on Qureshey (in combination with Al-Shaykh) as

teaching the elements of this limitation. Pet. 27–34 (citing Ex. 1003

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[15] Petitioner relies on Patent Owner's construction of "multimedia" as "includ[ing] audio only content." Pet. 30–31 n.2; *see also* PO Resp. 19. Petitioner also contends, "[e]ven if 'multimedia' required content constituting more than one type of media (e.g., audio and video), Al-Shaykh discloses playback of such type of content." *Id.* at 31 n.2 (citing Ex. 1007 ¶¶ 3, 4, 84, 160–167).

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(Bims Decl.) ¶¶ 95–103; Ex. 1008, 3:34–39, 3:46–47, 7:55–58, 13:8–27, 14:32–47, 16:29–32, 16:56–60, 21:62–65, 22:48–58, 24:26–30, 28:11–43, 35:33–67, 37:22–26 (claim 43), Figs. 6B, 11, 15. Petitioner provides a colored version of Figure 6B of Qureshey, reproduced below. *Id.* at 30.
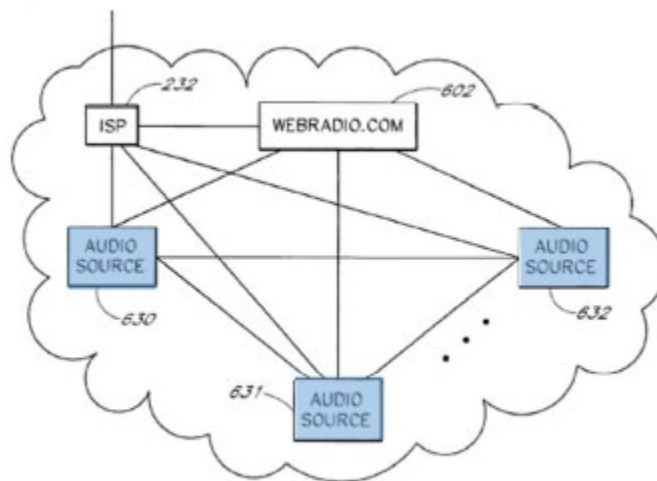

FIG. 6B

Id. Figure 6B depicts the "relationship between the site 602 and other Web sites that supply streaming audio information, such as a site 630, a site 631, and a site 632." Ex. 1008, 14: 32–34. Petitioner also provides a colored version of Figure 11 of Qureshey, reproduced below. *Id.*

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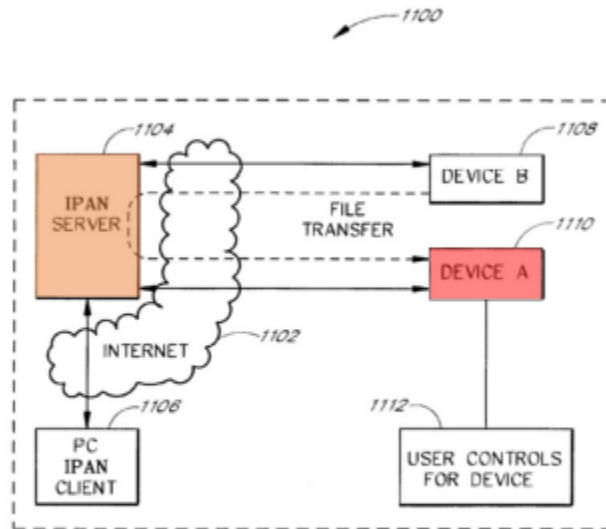
FIG. 11

Id. Figure 11 depicts "an IPAN [Internet Personal Audio Network] 1100 includes an IPAN server 1104, a PC IPAN client 1106, a network 1102, a device B 1108, a device A 1110, and user controls 1112. The PC IPAN client 1106 connects to the IPAN Server 1104 through the network 1102 (such as the Internet)." Ex. 1008, 16:56–60. Petitioner further provides a colored version of Figure 15 of Qureshey, reproduced below. Pet. 28.
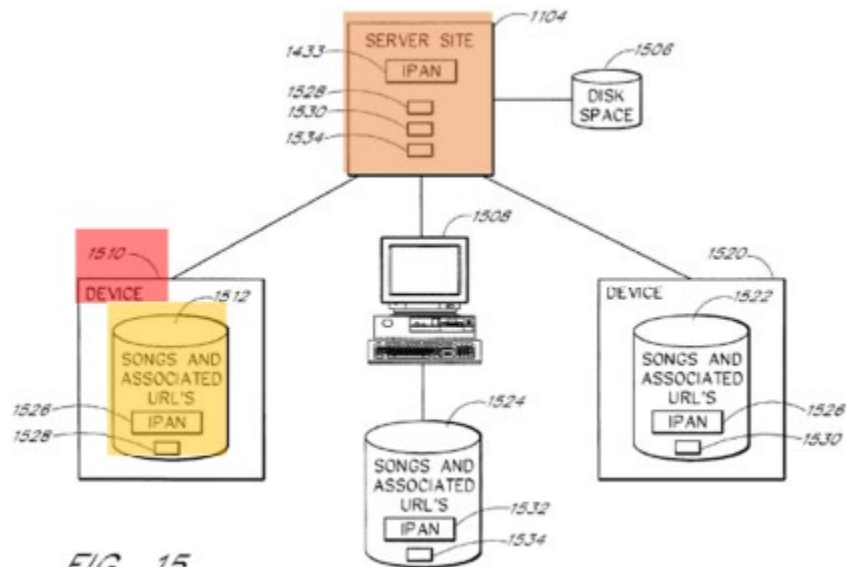

FIG. 15

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Id. Fig. 15 depicts "a configuration for assigning playlists and audio sources to a network-enabled audio device 1510 or other devices such as a PC 1508 from a network-enabled audio device 1520 or another device." Ex. 1008, 21:40–43.

> Petitioner contends:
>
> Qureshey's IPAN server 1104 is a *first cloud server* and Qureshey's audio sources 630-632 constitute *second cloud servers of a streaming content service.* Both the IPAN server 1104 and audio sources 630-632 constitute cloud servers because they are remote computing systems that are accessed over the Internet. Pet. 28–29 (citing Ex. 1003 ¶ 97; Ex. 1008, 3:34–39, 13:8–27, 14:32–47, 16:29–31, 16:56–60, Figs. 6B, 11, 15).
>
> <p align="center">* * *</p>
>
> Qureshey discloses a synchronization procedure that causes an IPAN cloud server to add an updated playlist to the storage space 1512 of a network-enabled audio device, wherein the updated playlist includes a list of audio files and Uniform Resource Locators (URLs) corresponding to the location of the audio files in the playlist. *Id.* at 30–31) (citing Ex. 1003 ¶ 98; Ex. 1008, 3:46–47, 7:55–58, 14:32–47, 21:62–65, 22:48–58, 24:26–30, 37:22–26, Figs. 6B, 11, 15) (footnote omitted).
>
> <p align="center">* * *</p>
>
> [T]he network-enabled audio device contains a local playback queue that contains a playlist with URLs and a certain list of media (e.g., list of songs for playback) stored within the storage space 1512. The stored URLs are used for retrieval and playback of the certain list of songs in a particular sequence. *Id.* at 31–32) (citing Ex. 1003 ¶¶ 99, 100; Ex. 1008, 21:43-46, 21:62-67, 28:11-43, 35:33-67)).
>
> <p align="center">* * *</p>
>
> [A] POSA would understand that the storage space 1512 containing a playlist with URLs and a certain list of songs includes a local playback queue with URLs used for both retrieving songs and playing them back in a particular sequence,

<p align="center">36</p>

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and the list of songs included in the playlist indicates the particular sequence of playback itself. . . . the playlist can store the songs themselves, additionally indicating that Quershey discloses adding multimedia content to a local playback queue. *Id*. at 32) (citing Ex. 1003 ¶¶ 99, 100)).

* * *

[I]n the combined Al-Shaykh-Qureshey system, when a set of inputs to transfer playback from the mobile device to the particular rendering device is detected, as disclosed in Al-Shaykh, then the system would cause a first cloud server (i.e., Qureshey's IPAN server) to add URLs associated with the locations of the audio files to the storage space 1512 (as disclosed in Qureshey) in Al-Shaykh's rendering devices. *Id.* at 33.

* * *

[A] POSA would have been motivated to incorporate the back-end server functionality that enables a rendering device to directly retrieve content from the Internet to play back, as taught by Qureshey, into Al-Shaykh's system, to the extent that Al-Shaykh does not disclose this functionality. *Id.* at 33–34 (citing Ex. 1007 ¶¶ 15, 94, 97; Ex. 1008, 3:34–39, 13:8–27, 14:32–47, 16:29–32, 16:56–60, Figs. 6B, 11, 15).

The cited passages and figures of Qureshey support Petitioner's argument that all the elements of this limitation are taught by the cited art.

Patent Owner criticizes Petitioner's showing with regard to this limitation because, according to Patent Owner, Qureshey relates to transferring playlists not playback queues. Patent Owner argues:

Qureshey fails to teach "transferring ***playback***," as claimed. Simply put, Qureshey relates to "audio ***file transfers***" and "***distribution of audio files*** over a computer network such as the Internet." As explained, a POSA would understand that ***merely*** transferring audio files is fundamentally different from transferring one device's function of ***rendering*** of content to another device, as claimed.

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PO Resp. 45. This argument is misdirected because it attacks Qureshey in
isolation and does not consider the presentation in the Petition regarding the
combination of Al-Shaykh and Qureshey. As is clear from the Petition,
Qureshey only is relied upon "to incorporate the back-end server
functionality that enables a rendering device to directly retrieve content from
the Internet to play back, as taught by Qureshey, into Al-Shaykh's system, to
the extent that Al-Shaykh does not disclose this functionality." Pet. 33–34.
This particular limitation does not explicitly recite "transferring playback"
and the presentation in the Petition as to "transferring playback" as recited is
discussed above in relation to the limitations 1-c, 1-d, and 1-e in which this
claim element is recited. In that discussion, Petitioner relies on Al-Shaykh
to teach "transferring playback." *See* Pet. 22–27. Patent Owner's argument
is unavailing.

Patent Owner next argues that Qureshey fails to teach the two cloud
servers recited in this limitation because Petitioner "conflates Qureshey's
two alternative 'modes of operation' to make this allegation." PO Resp. 45.
According to Patent Owner, "Qureshey discloses an 'intelligent radio
device' that can operate in two alternative modes: 'Web Radio mode' and
'playlist mode,'" and asserts that "[a] POSA would not have mixed and
matched teachings of these alternative modes of operation." *Id.* at 45–46. In
response to this argument, Petitioner contends:

> [Patent Owner's] argument that Qureshey's playlist and
> Web radio modes of operation are incompatible (POR, 45-47)
> ignores [Petitioner]'s mapping, which shows that Qureshey's
> intelligent audio device, when operating in playlist mode,
> retrieves content from remote sources to stream. Pet., 32;
> Qureshey, 35:33-67, 1:53-64, 3:5-12. These remote sources
> include web site audio sources 630-632, which are remote

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computing systems. Pet., 28-29. Thus, [Petitioner]'s mapping does not rely on the Web radio mode.

Pet. Reply 10. Considering these arguments and weighing the evidence presented, we find that, when in the "playlist mode," Qureshey teaches two cloud servers (the IPAN server and a remote server accessed over the Internet using the URLs in the playlist) as recited in this limitation. Otherwise, the URLs would serve no purpose.

And, Patent Owner argues that Qureshey teaches transferring playlists instead of a playback queue (*see* PO Resp. 47–49), because "a given stored 'playlist' is not set to be played by the 'network-enabled audio device' in Qureshey until a user manually selects the given 'playlist' using the interface on the "network-enabled audio device'" (*id.* at 49 (citing Ex. 2018 (Schmidt Decl.), ¶ 201)). In response to this argument, Petitioner cites to claim 4 of Qureshey and states, "Qureshey discloses that the audio device is '*adapted to enable playback from [its] data storage device*' and thus the media is 'set to play' from storage space 1512." Pet. Reply 9–10 (alteration in original). We also note that claim 1 of Qureshey from which claim 4 depends recites:

> 1. An electronic device comprising:
> a) a network interface enabling the electronic device to
>   receive an Internet radio broadcast and being further
>   adapted to communicatively couple the electronic
>   device to a central system;
> b) *a system enabling playback of audio content from a
>   playlist assigned to the electronic device via the central
>   system*; and
> c) a control system associated with the network interface
>   and the system enabling playback of the audio content
>   indicated by the playlist, and adapted to:
>   i) enable a user of the electronic device to select a desired
>   mode of operation from a plurality of modes of operation
>   comprising an Internet radio mode of operation

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> and a playlist mode of operation;
> ii) receive and play the Internet radio broadcast when the
> desired mode of operation is the Internet radio mode
> of operation; and
> iii) **when the desired mode of operation is the playlist
> mode of operation**:
> **receive the playlist** assigned to the electronic device
> from the central system, the playlist identifying a
> plurality of songs, wherein ones of the plurality of
> songs are not stored on the electronic device;
> receive information from the central system enabling
> the electronic device to obtain the ones of the plurality
> of songs from at least one remote source;
> **obtain the ones of the plurality of songs from the at
> least one remote source**; and
> **play the audio content indicated by the playlist**.

Ex. 1008, 34:6–35 (emphasis added). We find that Qureshey teaches

enabling the playback of the playlists stored in a data storage device. Thus,

Patent Owner's argument is not supported by Qureshey.

With regard to combining the relevant teachings of Al-Shaykh and

Qureshey, the Petition alleges the following motivations:

> Al-Shaykh and Qureshey are in the same field of
> endeavor, deal with similar devices, and are directed to solving
> the same problems in those devices. Pet. 14 (citing Ex. 1003
> (Bims Decl.) ¶ 72).
>
> * * *
>
> A POSA would also have been motivated to combine
> these references to develop an improved GUI for control
> devices in a multimedia playback network. Pet. 15 (citing
> Ex. 1003 (Bims Decl.) ¶ 73).
>
> * * *
>
> [A] POSA would have been motivated to incorporate the back-
> end server functionality that enables a rendering device to
> directly retrieve content from the Internet to play back, as
> taught by Qureshey, into Al-Shaykh's system, to the extent that
> Al-Shaykh does not disclose this functionality. . . . Al-Shaykh's

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> rendering devices can directly retrieve media content from a
> remote server for playback but Al-Shaykh does not explain the
> details on the back-end functionality that facilitates this
> transaction. . . . A POSA would have looked to similar
> references in the art for further disclosures of networked
> playback systems to determine how playback devices within the
> systems are able to directly retrieve content from remote
> sources, and, thus, a POSA would have found it obvious to
> combine Al-Shaykh and Qureshey in this way. Pet. 33–34
> (citing Ex. 1003 (Bims Decl.) ¶¶ 102–103; Ex. 1007 (Al-
> Shaykh) ¶¶ 15, 94, 97; Ex. 1008 (Qureshey), 3:34-39, 13:8-27,
> 14:32-47, 16:29-32, 16:56-60, Figs. 6B, 11, 15).

<p style="text-align:center">* * *</p>

> Both Al-Shaykh and Qureshey disclose "one or more second
> cloud servers of a streaming content service" and, thus,
> Qureshey's second cloud server (i.e., audio sources 630-632) do
> not need to be incorporated into the Al-Shaykh-Qureshey
> combination. However, this similarity is another reason that a
> POSA would modify Al-Shaykh with Qureshey. Pet. 33 fn.3.

<p style="text-align:center">* * *</p>

> [A] POSA would have been motivated to implement
> Qureshey's back-end server functionality to improve the system
> by preventing any disconnection or failure of a mobile control
> device to impact ongoing playback on the rendering device. . . .
> That is, the added functionality enables storage of URLs on the
> rendering device such that the rendering device can retrieve the
> content to be played back without assistance from the mobile
> control device. . . . Such a combination would improve the user
> experience by minimizing playback stoppages at the rendering
> device. Pet. 34 (citing Ex. 1003 (Bims Decl.) ¶ 103).

The Petition clearly articulates why a skilled artisan would have been

motivated to combine the relevant teachings of Al-Shaykh and Qureshey by

providing specific reasoning based on facts in the record and logic.

Patent Owner attacks Petitioner's showing with regard to motivation

to combine Al-Shaykh and Qureshey for a number of reasons. *See* PO

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Resp. 26–31, 35–44. First, Patent Owner argues that "[Petitioner]'s high-level reasons – including that they are 'in the same field of endeavor,' 'deal with similar devices,' and are directed to solving the 'same' or 'similar' problems (Petition, 14-16) – are simply too generic and conclusory and evidence [Petitioner]'s impermissible hindsight bias." PO Resp. 26. But the Supreme Court's decision in *KSR Int'l Co. v. Teleflex Inc.*, 550 U.S. 398 (2007) addressing motivation to combine contains language that undermines this argument. The Supreme Court said, "[A]ny need or problem known in the field of endeavor at the time of invention and addressed by the patent can provide a reason for combining the elements in the manner claimed." *KSR*, 550 U.S. at 420. And, "if a technique has been used to improve one device, and a person of ordinary skill in the art would recognize that it would improve similar devices in the same way, using the technique is obvious unless its actual application is beyond his or her skill." *KSR*, 550 U.S. at 417.

The contentions in the Petition that "Al-Shaykh and Qureshey are in the same field of endeavor, deal with similar devices, and are directed to solving the same problems in those devices" (Pet. 14) are well-supported by citations to Al-Shaykh and Qureshey and the Declaration of Dr. Bims. *Id.* at 14–16 (citing Ex. 1003 ¶¶ 72–77; Ex. 1007, Abstract, ¶¶ 4, 5, 11, 53, 78, 80, 82, 87, 90, 92, Fig. 1; Ex. 1008, code (57) (Abstract), 1:16–33, 1:27–52, 1:65–2:13, 2:16–33, 2:58–3:4, 3:57–4:3, 16:29–17:31, 21:40–23:5, 24:31–43, Figs. 11, 15, 17B). Patent Owner does not directly address or persuasively counter Petitioner's arguments and evidence that Al-Shaykh and Qureshey are in the same field of endeavor, deal with similar devices, and are directed to solving the same problems in those devices. *See* PO

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Resp. 26–31. However, in discussing these aspects of Petitioner's showing as to motivation to combine, Patent Owner repeatedly acknowledges that Qureshsey's system and approach were well-known. *Id.* at 27–29 (describing Qureshsey's system and approach as well-known five times). There is a motivation to combine when a known technique 'has been used to improve one device, and a person of ordinary skill in the art would recognize that it would improve similar devices in the same way' using the 'prior art elements according to their established functions.'" *Intel Corp. v. Pact XPP Schweiz AG*, No. 2022-1037, slip. op. at 12 (Fed. Cir. Mar. 13, 2023) (quoting *KSR*, 550 U.S. at 417, and *Intel Corp. v. Qualcomm Inc.*, 21 F. 4th 784, 799–800 (Fed. Cir. 2021). We disagree with Patent Owner's arguments that Petitioner has relied on improper hindsight in combining the relevant teachings of Al-Shaykh and Qureshey, because (1) Petitioner's reasons for combining these teachings are well-founded in the particular teachings of these references as shown in the Petition, and (2) the functionality from Qureshey that Petitioner adds to the teachings of Al-Shaykh is well-known to a skilled artisan (as acknowledged by Patent Owner). Based on this record, we find that Al-Shaykh, and Qureshey are in the same field of endeavor, deal with similar devices, and are directed to the solving the same or similar problems, and that these findings support the further finding that a skilled artisan would be motivated to look to Qureshey to improve Al-Shaykh's rendering devices by allowing them to retrieve media content directly from a remote server for playback.

We have also considered Patent Owner's other arguments (*see* PO Resp. 35–44) relating to combining the specific functionality recited in limitation 1-f as taught by Qureshey with the relied-upon teachings of Al-

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Shaykh as discussed in the Petition and set forth above, and we find that the

reasons provided in the Petition support finding that a skilled artisan would

be motivated to combine the relevant teachings of Al-Shaykh and Qureshey.

Specifically, we find that a skilled artisan "would have been motivated to

incorporate the back-end server functionality that enables a rendering device

to directly retrieve content from the Internet to play back, as taught by

Qureshey, into Al-Shaykh's system, to the extent that Al-Shaykh does not

disclose this functionality" as argued by Petitioner. Pet. 33–34. The Petition

states:

> Al-Shaykh's rendering devices can directly retrieve media
> content from a remote server for playback but Al-Shaykh does
> not explain the details on the back-end functionality that
> facilitates this transaction. A POSA would have looked to
> similar references in the art for further disclosures of networked
> playback systems to determine how playback devices within the
> systems are able to directly retrieve content from remote
> sources, and, thus, a POSA would have found it obvious to
> combine Al-Shaykh and Qureshey in this way.

Id. at 34 (citations omitted). As noted above, Patent Owner acknowledges

that Qureshey's system and approach were well-known. *See* PO Resp. 27–

29. Patent Owner asserts various reasons why modifying Al-Shaykh to

incorporate the functionality of this limitation was unnecessary and would

not have improved Al-Shaykh. *See* PO Resp. 35–44. But, Petitioner's

combination of teachings relating to devices and functions that were known

in the art is well-supported. Moreover, it is not necessary for Petitioner to

show a combination is the best option, only that it is a suitable option. *Intel*,

21 F.4th at 800.

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We find that Qureshey teaches this limitation and that a skilled artisan would have been motived to combine the relevant teachings of Al-Shaykh and Qureshey to include all the elements recited in this limitation.

> *causing playback at the control device to be stopped; and*
> (referred to by the parties as limitation or element 1-g (*see* Pet. 17; PO Resp. 18))

Petitioner relies on Al-Shaykh as teaching all the elements of this limitation. Pet. 35–36 (citing Ex. 1003 (Bims Decl.) ¶¶ 121–123; Ex. 1007 ¶¶ 53, 93, 100, 156, 157, 166, 167, 173, 174). The Petition states:

> Al-Shaykh discloses the functionality required to stop playback at the mobile device when playback is transferred to the particular rendering device. Specifically, Al-Shaykh discloses transferring playback from an initial rendering device to a new rendering device. Al-Shaykh, [0156-57], [0166- 67], [0173-74]. When transfer occurs, "rendering of the music content on the initial target rendering device may be stopped, and … the rendering of music content on the new target rendering device may begin." Similarly, when rendering from the mobile device is transferred to the target rendering device, the rendering at the mobile device is stopped. *See id.*, [0174], [0157] (the user may transfer playback back from the rendering device to the mobile device by invoking the media transfer control 51 or control/indication element 71 a second time). Thus, a POSA would find Al-Shaykh renders obvious that a mobile device stops playback when playback is transferred to the particular rendering device. Bims, ¶ 106.

Id. at 35–36. As noted above, Petitioner presents an alternative argument that Phillips teaches this limitation. *See* Pet. 13, 37 ("To the extent Patent Owner disagrees that Al-Shaykh and Qureshey (Ground I) teaches this limitation, Phillips also discloses this limitation.") (citing Ex. 1003 (Bims Decl.) ¶¶ 112–120). In this regard, the Petition states:

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> Phillips discloses *causing playback at the control device to be stopped*, as recited . . . Specifically, Phillips discloses transferring content from a "mobile device 20" to a "desired renderer 14" and, "once transfer is complete, display of the video content at the mobile device 20 is terminated." *Id.*, 10:48-61; 7:28:42; Bims, ¶ 113.
>
> Further . . . Al-Shaykh discloses transferring playback to a particular rendering device. The teachings of Phillips can be implemented to Al-Shaykh's system when transfer of playback to a particular rendering device is complete. Specifically, when Al-Shaykh's system completes the transfer of playback to a particular rendering device, it would terminate the display of content at the mobile device, as Phillips teaches. Bims, ¶ 114.

Id. at 37. The cited passages and figures of Al-Shaykh and Phillips support Petitioner's argument that this limitation is taught by the cited art.

Patent Owner argues that Al-Shaykh teaches the opposite of the function recited in limitation 1-g because it teaches starting playback on the mobile device upon transferring the media content to a target rendering device. Specifically, Patent Owner argues:

> Al-Shaykh discloses the exact opposite function required by [this] limitation . . . . . Instead of "causing playback at the control device to be stopped" as part of "transferring playback," Al-Shaykh's "mobile device" begins (and/or resumes) rendering the "media content" after transferring the "media content." Ex.1007, ¶132. Specifically, Al-Shaykh discloses, in response to "enabl[ing] transfer of the media content to a target rendering," "the media application [of the mobile device] may begin and/or may resume rendering of the media content on the mobile device 11 substantially simultaneously with the transfer to and/or the rendering of the media content on the target rendering device." *Id.*

PO Resp. 50 (emphases in original omitted). Patent Owner cites paragraph 132 of Al-Shaykh in support of this argument. *Id.* This argument is based

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upon an incorrect interpretation of paragraph 132 of Al-Shaykh, which

states:

> In an embodiment, the media application may change a
> state of the media application. The media application may
> cause one or more of the media controls 42 to be invoked in
> response to user input, which selects and/or invokes the one or
> more of the media controls 42 in the set of controls and
> indications 35. For example, the media application may have
> an internal state for media playback on the mobile device 11,
> and/or the internal state may be set to "PLAY" to indicate that
> media content is playing on the mobile device 11 or set to
> "PAUSE" to indicate that the media playback is paused on the
> mobile device 11. The user 12 may enable transfer of the
> media content to a target rendering device by invoking the
> media transfer control 51, the media transfer control/indication
> 61 and/or the single control/indication element 71 when the
> media application has the internal state set to "PAUSE." In
> response, the media application may change the internal state
> from "PAUSE" to "PLAY" and/or may take other actions
> associated with selection and/or invocation of a "play" control
> in the media controls 42. As a result, the media application
> may begin and/or may resume rendering of the media content
> on the mobile device 11 substantially simultaneously with the
> transfer to and/or the rendering of the media content on the
> target rendering device. In a similar fashion, the media
> application may change the internal state from "PLAY" to
> "PAUSE" in response to the user 12 disabling the transfer of the
> media content to the target rendering device by invoking the
> media transfer control 51, the media transfer control/indication
> 61 and/or the single control/indication element 71.

Ex. 1007 ¶ 132. This paragraph states the exact opposite of what Patent

Owner says it states. Paragraph 132 of Al-Shaykh addresses how the

"PLAY/PAUSE" state of the media application may be changed when

invoking the media transfer control. If the media application of the mobile

device is set to "PAUSE" when the user invokes the media transfer control

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to transfer the media content to a target rendering device, the state is changed from "PAUSE" to "PLAY." If the state is set to "PLAY" and the media content is playing on the mobile device, the state is not changed. Stated differently, this paragraph teaches that, when the user invokes the media transfer control, the mobile device is set to "PLAY" in all instances and the mobile device continues or begins rendering the media content and then transfers the media content to the target rendering device where it continues to be rendered.

As disclosed in the paragraphs of Al-Shaykh that Petitioner cites for this limitation (*see* Pet. 35–36 (citing Ex. 1007 ¶¶ 156, 157, 166, 167, 173, 174)), Al-Shaykh stops rendering of the media content on the device currently rendering the media content when the media content is transferred to a new rendering device. Our understanding of the disclosure of Al-Shaykh in this regard is confirmed by paragraphs 104–106 of Dr. Bims's Declaration that state:

> 104. It is my opinion that Al-Shaykh discloses transferring playback from the control device to the particular playback device further comprising causing playback at the control device to be stopped (e.g., enabling transfer of media content to rendering device stops playback at the mobile device). Al-Shaykh, [0100], [0053], [0093], [0156-57], [0166-67], [0173-74].
>
> 105. As explained in Section X.A.2.e, Al-Shaykh discloses transferring playback from the control device to the particular playback device. Further, a POSA would understand that transferring playback "enable[s] a user to use the mobile device to start and stop external rendering of the media content currently selected in a media application executed by the mobile device." *Id.*, [0053]. Specifically, a POSA would, in my opinion, recognize that invoking media transfer control 51 or control/indication element 71 (as explained in Section X.A.2.c) enables or disables the transfer of media content to the

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rendering device. *Id.*, [0100]. Al-Shaykh explicitly notes that disabling causes "the target rendering device [to] stop rendering the media content 15." *Id.* Thus, it is my opinion that a POSA would understand that enabling the transfer of media content to the rendering device would cause the mobile to stop playback.

106. Additionally, it is my opinion that Al-Shaykh discloses the functionality required to stop playback at the mobile device when playback is transferred to the particular rendering device. Specifically, a POSA would recognize that Al-Shaykh discloses transferring playback from an initial rendering device to a new rendering device. *Id.*, [0156-57], [0166-67], [0173-74]. When transfer occurs, "rendering of the music content on the initial target rendering device may be stopped, and … the rendering of music content on the new target rendering device may begin." Similarly, when rendering from the mobile device is transferred to the target rendering device, the rendering at the mobile device is stopped. *Id.*, [0174], [0157] (the user may transfer playback back from the rendering device to the mobile device by invoking the media transfer control 51 or control/indication element 71 a second time). Thus, a POSA, in my opinion, would find Al-Shaykh renders obvious that a mobile device stops playback when playback is transferred to the particular rendering device.

Ex. 1003 ¶¶ 104–106 (alterations in original). We credit the testimony of Dr. Bims on this particular issue and find it is well-supported by Al-Shaykh. We disagree with Patent Owner's arguments relating to this limitation and Al-Shaykh and, instead, we find that Al-Shaykh teaches this limitation.

With regard to the combinations of references including Phillips, Patent Owner does not dispute that Phillips teaches this limitation. However, Patent Owner does dispute whether Petitioner has shown a motivation to combine Phillips and Al-Shaykh. PO Resp. 53–58. Petitioner contends that, "[a] POSA would have been motivated to and would have found it obvious to add Phillips's functionality to Al-Shaykh's system for

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several reasons." Pet. 37 (citing Ex. 1003 (Bims Decl.) ¶ 115). In this

regard, the Petition states:

> Al-Shaykh and Phillips are in the same field of endeavor,
> deal with similar devices, and are directed to solving the same
> problems in those devices. *Id.* at 38 (citing Ex. 1003 (Bims
> Decl.) ¶ 116).
>
> <div align="center">* * *</div>
>
> [B]oth references enable users to transfer playback to various
> devices and playback content on those devices from the
> Internet, which provides much greater accessibility to content
> than traditional systems that were limited to playback of content
> locally stored on the network. *Id.* (citing Ex. 1006, 3:18–42;
> Ex. 1007 ¶ 90).
>
> <div align="center">* * *</div>
>
> [B]oth references describe networked media playback systems
> that include a control device and one or more rendering devices.
> *Id.* (citing Ex. 1003 (Bims Decl.) ¶ 117); Ex. 1006, Fig. 11
> (showing renderers 14 and mobile device 20 in a LAN 18);
> Ex. 1007, code (57) (Abstract), ¶ 78, Fig. 1 (showing mobile
> device 11 and rendering devices 21, 22, 23 in home network
> 20).
>
> <div align="center">* * *</div>
>
> Al-Shaykh and Phillips involve similar media playback systems
> that are often used in homes or offices and allow users the
> flexibility of playing content on various device configurations
> for different scenarios. *Id.* at 38–39 (citing Ex. 1006, 1:19-34;
> Ex. 1007 ¶ 5) ("the user may render the music content on a high
> quality stereo in the home instead of being limited to playback
> using the mobile device.").
>
> <div align="center">* * *</div>
>
> Al-Shaykh and Phillips disclose methods to seamlessly transfer
> playback of media content from a control device to a playback
> device without delay and in a manner that the user can still
> control playback and conduct other tasks from the control
> device. *Id.* at 39 (citing Ex. 1006, 1:19-34; Ex. 1007 ¶ 53).

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* * *

These media playback systems provide a more affordable
option that mixes expensive control devices with low-cost
rendering devices and improves the user's video watching
experience at home by providing the flexibility of seamlessly
using the rendering devices. *Id.* (citing Ex. 1006, 1:19-34;
Ex. 1007 ¶ 4).

* * *

[A] POSA would have been motivated to incorporate
terminating playback at the mobile device when playback is
transferred to rendering device, as taught by Phillips, into Al-
Shaykh's system, to the extent that Al-Shaykh does not disclose
this functionality. . . . [A] POSA would at least have looked to
similar references in the art for further disclosures of networked
playback systems to determine what occurs at the mobile device
when playback is transferred to a rendering device. . . .
Moreover, a POSA would have been motived to implement this
functionality, as described in Phillips, because it improves the
system by allowing users to perform other tasks on their mobile
phone while playback continues on the rendering device. *Id.* at
39–40 (citing Ex. 1003 (Bims Decl.) ¶¶ 119–120; Ex. 1006,
7:28-42; Ex. 1007 ¶¶ 15, 94, 97).

The Petition clearly articulates why a skilled artisan would have been

motivated to combine the relevant teachings of Al-Shaykh and Phillips by

providing specific reasoning based on facts in the record and logic.

In response, Patent Owner argues that, "[a] POSA, however, would

not have been motivated to combine Al-Shaykh with Phillips in the manner

proposed by [Petitioner] for several reasons." PO Resp. 53 (citing Ex 2018

(Schmidt Decl.) ¶ 273). Patent Owner argues that the "high level reasons"

("Al-Shaykh and Phillips are in the same field of endeavor, deal with similar

devices, and are directed to solving the same problems in those devices."

(Pet. 38)) provided in the Petition "as it did for Al-Shaykh and Qureshey . . .

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fail for the same reasons discussed before." PO Resp. 53. As discussed above with regard to Al-Shaykh and Qureshey, we find these reasons to be valid and supported by the evidence of record.

Patent Owner also argues that there is no motivation to combine Al-Shaykh and Phillips, because Al-Shaykh allegedly does not disclose "transferring playback." PO Resp. 55. For reasons discussed above with respect to limitation 1-c, 1-d, and 1-e, we disagree with this argument because Al-Shaykh teaches this claim element.

Similarly, Patent Owner argues that there is no motivation to combine Al-Shaykh and Phillips, because Al-Shaykh allegedly does not disclose stopping rendering on the mobile device when the media content is transferred to a rendering device. PO Resp. 56–57. For the reasons discussed above with respect to limitation 1-g, we disagree with this argument because Al-Shaykh alone or in combination with Phillips teaches this claim element.

Considering all the arguments and evidence of the parties on the issue of motivation to combine Al-Shaykh and Phillips, we find that a skilled artisan would have been motivated to combine the relevant teachings of Al-Shaykh and Phillips. And, we find that Al-Shaykh alone or in combination with Phillips teach "causing playback at the control device to be stopped" as recited.

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> *modifying the one or more transport controls of the control*
> *interface to control playback by the playback device; and*
> (referred to by the parties as limitation or element 1-h (*see*
> Pet. 17; PO Resp. 18))

Petitioner relies on Al-Shaykh as teaching all the elements of this
limitation. Pet. 40–41 (citing Ex. 1003 (Bims Decl.) ¶¶ 104–106; Ex. 1007
¶¶ 53, 93, 100, 156, 157, 166, 167, 173, 174). The Petition states:

> Al-Shaykh further discloses that the same media controls
> 42 that are configured to control playback of the mobile device
> are configured to control playback of the rendering device. Al-
> Shaykh, [0092], [0172], [0013], [0162] . . . A POSA would
> understand that the media controls on user interface 31 must be
> modified in order for the same media controls to be configured
> to control playback in both modes (i.e., a first mode where
> playback is at the mobile device and a second mode where
> playback is transferred to the rendering device). Bims, ¶ 123.
> Specifically, when playback is transferred from the mobile
> device to the rendering device, the media controls must be
> modified in order to change the command operation such that
> use of one of the media controls the operation of the rendering
> device and not the mobile phone. *Id.*

Id. at 41. The cited passages of Al-Shaykh support Petitioner's argument
that all the elements of this limitation are taught by the cited art.

Patent Owner's entire response with regard to this limitation is "Al-
Shaykh and Qureshey fail to teach [this] limitation . . . for at least the reason
that neither reference teaches 'transferring *playback*.'" PO Resp. 58. As
noted above with respect to limitations 1-c, 1-d, and 1-e, we find Al-Shaykh
teaches "transferring playback" as recited and we further find that Al-
Shaykh teaches this limitation.

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> *causing the particular playback device to play back the*
> *multimedia content, wherein the particular playback device*
> *playing back the multimedia content comprises the particular*
> *playback device retrieving the multimedia content from one*
> *or more second cloud servers of a streaming content service*
> *and playing back the retrieved multimedia content.* (referred
> to by the parties as limitation or element 1-i (*see* Pet. 17; PO
> Resp. 18))

Petitioner contends that both Al-Shaykh and Qureshey teach all the

elements of this limitation. Pet. 41–45 (citing Ex. 1003 (Bims Decl.)

¶¶ 124–131; Ex. 1007 ¶¶ 6, 15, 20, 82, 90, 92–95, 97, Fig. 1; Ex. 1008,

2:40–46, 4:62–64, 14:32–47, 21:62–65, 24:17–30, 35:33–36:3, Fig. 6B).

With regard to Al-Shaykh, the Petition states:

> Al-Shaykh discloses "rendering [] media content on the target
> rendering device." Pet. 42 (citing Ex. 1007 ¶¶ 15, 97)
> (alteration in original).

> * * *

> Al-Shaykh discloses a "remote content service" that provides
> devices access to stream media content from the internet using,
> for example, a "service-specific" or "media" application. . . .
> Al-Shaykh further discloses a "remote content provider" that
> directly transmits the media content to the devices. . . . Thus,
> Al-Shaykh's remote content provider transmitting content
> accessible from a remote content service would constitute a
> second cloud server of a streaming content service because Al-
> Shayk's system comprises a remote computing system that is
> accessed over the Internet. *Id.* at 43 (citing Ex. 1003 ¶ 127;
> Ex. 1007 ¶¶ 6, 20, 80, 82, 90, 92, 93, 95, Fig. 1).

> * * *

> Al-Shaykh further discloses that the particular rendering device
> can directly retrieve media content to playback without the
> media content originating from or flowing through the mobile
> device 11. *Id.* at 44 (citing Ex. 1003 ¶ 129; Ex. 1007 ¶¶ 94,
> 95).

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With regard to Qureshey, the Petition states:

> Qureshey discloses a networked-enabled audio device (also referred to as an electronic device) that retrieves audio content from a remote source and plays it back. Pet. 44 (citing Ex. 1003, ¶¶ 129–131; Ex. 1008, 2:40–46, 4:62–64, 14:32–47, 35:33-36:3, Fig. 6B).

<div align="center">* * *</div>

> [T]he networked-enabled audio device stores a playlist that includes URLs that indicate the location of audio files. . . . the remote source that audio files can be retrieved from are audio sources 630-632 that constitute second cloud servers of a streaming content service. *Id.* at 45 (citing Ex. 1008, 21:62-65, 22:48-58, 24:17-30).

The cited passages and figures of Al-Shaykh and Qureshey support Petitioner's argument that all the elements of this limitation are taught by the cited art.

Patent Owner argues that neither Al-Shaykh nor Qureshey teach this limitation. PO Resp. 58–61. With regard to Al-Shaykh, Patent Owner argues that "[Petitioner] fails to establish that Al-Shaykh teaches 'the *particular playback device* retrieving the multimedia content *from one or more second cloud servers*" as recited, because the media content is not directly transmitted from the remote content provider to the target rendering device and, instead, is relayed through the mobile device. *Id.* at 59–60. This argument is contradicted by Al-Shaykh, which states, "if the 'media in context' in the media application is not stored locally on the mobile device 11, the media content may or *may not* flow through the mobile device 11 if the transfer of the media content to a target rendering device is enabled using the set of controls and indications 35." Ex. 1007 ¶ 94 (emphasis added). We, therefore, disagree with Patent Owner's argument.

<div align="center">55</div>

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With regard to Qureshey, Patent Owner argues that "[Petitioner] fails to establish that the claimed '*control device*' is capable of '*causing the particular playback device to play back the multimedia content*' as recited." PO Resp. 60. But, as Petitioner correctly points out, "[a] plain reading of claim 1 shows that this is not required." Pet. Reply 21. Petitioner also argues that "Qureshey's 'PC Device' (control device) causes the audio device to playback content because the PC device facilitates the synchronization procedure for updating the playlist with URLs stored at the audio device, which the audio device then uses to retrieve content for playback." *Id.* at 21–22 (citing Ex. 1008, claim 16); *see also* Pet. 30–31, 44–45. We agree with Petitioner on both points and, therefore, we disagree with Patent Owner's argument.

In the Petition, Petitioner relies on its previous showing, discussed above with respect to limitation 1-f, relating to motivation to combine Al-Shaykh and Qureshey. Pet. 45. In response, Patent Owner argues that "[Petitioner] provides no specific reason why a POSA would have been motivated to combine Al-Shaykh and Qureshey to achieve [this] limitation." PO Resp. 59. Petitioner replies:

> To the extent Al-Shaykh does not sufficiently disclose this limitation, a POSA would have sought other references, like Qureshey, to understand how the rendering devices would retrieve content from remote cloud sources. Pet., 45, 33-34. Implementing Qureshey's method for remotely storing content to be retrieved via URL by the rendering device would beneficially avoid disruptions from disconnection or failure at the mobile device during playback at the rendering device. *Id.*

Pet. Reply 22.   For the same reasons set forth above with respect to limitations 1-f, we find that a skilled artisan would have been motivated to

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combine the relevant teachings of Al-Shaykh and Qureshey as recited in this limitation.

Summary for Claim 1

For the reasons set forth above, we find that Petitioner has established by a preponderance of the evidence that all the limitations of claim 1 are taught or suggested by (1) a combination of Al-Shaykh and Qureshey; and (2) a combination of Al-Shaykh, Qureshey, and Phillips. We also find that Petitioner has established by a preponderance of the evidence that a skilled artisan would have been motivated to combine the teachings of (1) Al-Shaykh and Qureshey; and (2) Al-Shaykh, Qureshey, and Phillips. Accordingly, we conclude that claim 1 is unpatentable as obvious in view of (1) a combination of Al-Shaykh and Qureshey; and (2) a combination of Al-Shaykh, Qureshey, and Phillips.

2.   *Independent Claims 13 and 25*

Independent claims 13 and 25 are also challenged as obvious based on (1) a combination of Al-Shaykh and Qureshey; and (2) a combination of Al-Shaykh, Qureshey, and Phillips. Pet. 2, 45–49. The parties agree that independent claims 13 and 25 are substantially similar to independent claim 1. Pet. 45 ("Independent claims 13 and 25 are substantially similar to claim 1."); PO Resp. 18 ("[Patent Owner] agrees that claims 13 and 25 are substantially similar to claim 1."). And, neither party has suggested to us any material differences between independent claims 1, 13, and 25 that are relevant to our analysis. *See* Pet. 45–49; PO Resp. 61.

For the reasons set forth above for claim 1, we find that Petitioner has established by a preponderance of the evidence that all the limitations of claims 13 and 25 are taught or suggested by (1) a combination of Al-Shaykh

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and Qureshey; and by (2) a combination of Al-Shaykh, Qureshey, and
Phillips. We also find that Petitioner has established by a preponderance of
the evidence that a skilled artisan would have been motivated to combine the
teachings of (1) Al-Shaykh and Qureshey; and (2) Al-Shaykh, Qureshey,
and Phillips. We conclude that claims 13 and 25 are unpatentable as
obvious in view of (1) a combination of Al-Shaykh and Qureshey; and (2) a
combination of Al-Shaykh, Qureshey, and Phillips.

> 3.   *Dependent Claims 6–12, 18–24, and 27–29*

Dependent claims 6–12, 18–24, and 27–29 are also challenged as
obvious based on (1) a combination of Al-Shaykh and Qureshey; and (2) a
combination of Al-Shaykh, Qureshey, and Phillips. Pet. 2, 49–57. Patent
Owner contends that these challenges fail for the reasons argued by it with
regard to claim 1. PO Resp. 61–62. We disagree with those arguments for
the reasons stated above in analyzing the challenges to claim 1. Patent
Owner presents additional arguments with respect to certain dependent
claims, which we address separately in our analysis of the challenges to
dependent claims 6–12, 18–24, and 27–29 is set forth below.

Claim 6

Claim 6 recites:

> 6. *The method of claim 1, further comprising detecting, via*
> *the control device, a set of inputs to transfer playback from the*
> *playback device back to the control device, wherein*
> *transferring playback from the playback device back to the*
> *control device comprises:*
> > *causing playback at the playback device to be stopped; and*
> > *modifying the one or more transport controls of the control*
> > > *interface to control playback by the control device.*

Ex. 1001, 18:66–19:8.

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Petitioner relies on Al-Shaykh for teaching or suggesting all the additional limitations set forth in claim 6. *See* Pet. 49–52 (citing Ex. 1003 (Bims Decl.) ¶¶ 138–143; Ex. 1007 ¶¶ 31, 36, 85, 89, 99, 100, 114, 115, 119–121, 157, 166, 167, 173, 174, Figs. 2–5). In support of its contentions for claim 6, the Petition provides combined and annotated Figures 2, 3, and 5 of Al-Shaykh, reproduced below.
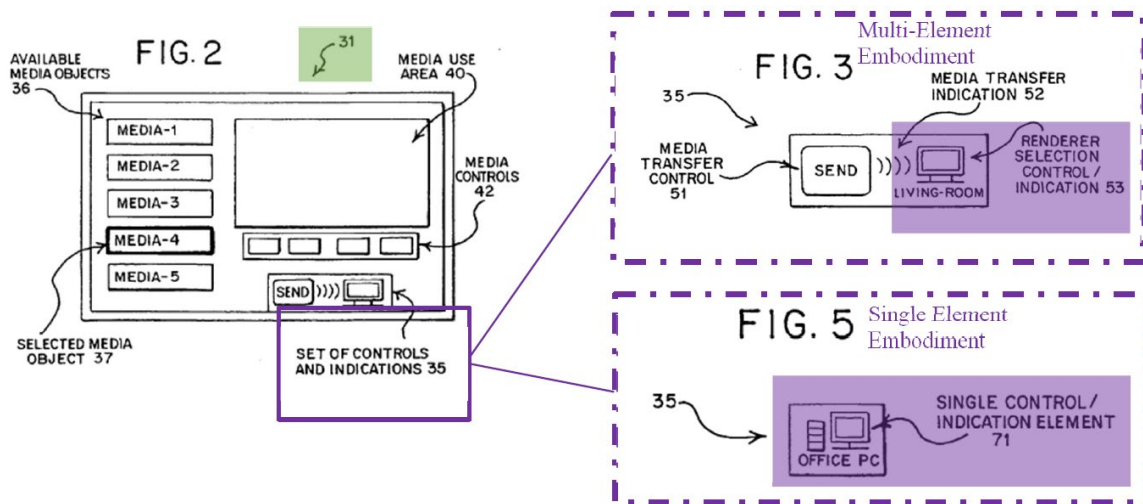
Pet. 50. Figure 2 depicts "a user interface of a media application having a set of controls and indications," and Figures 3 and 5 depict "sets of controls and indications." Ex. 1007 ¶¶ 69–70. The Petition states:

> After playback is transferred to the rendering device, a user can again invoke media transfer control 51 or control/indication element 71 on "user interface 31" to disable the transfer to the playback device and effectively transfer playback back to the mobile device. *Id.* Thus, Al-Shaykh discloses *detecting, via the control device, [an input] to transfer playback from the playback device back to the control device. See Bims, ¶ 139.*

<center>* * *</center>

> Al-Shaykh discloses that, when "the user 12 [] invoke[s] the media transfer control 51 [or control/indication element 71] in the user interface 200 to disable the transfer of the media content 15 to the target rendering device … the target rendering

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> device may stop rendering the media content 15." Al-Shaykh, [0157], [0166-67], [0173-74].
>
> Further, the media controls 42 that controlled playback at the rendering device when playback was transferred to the rendering device also control playback when playback is at the mobile device. . . . [A] POSA would understand that the media controls 42 must again be modified in order for the same media controls that control playback at the rendering device when transfer was enabled to also control playback at the mobile device when transfer is disabled. *See* Bims, ¶¶142-143.

Pet. 49–50, 51–52. The cited passages and figures in Al-Shaykh support Petitioner's contentions as to claim 6.

Patent Owner argues that Petitioner fails to establish that Al-Shaykh teaches "a set of inputs to transfer playback from the playback device back to the control device," as recited in claim 6. PO Resp. 62. Specifically, Patent Owner argues:

> [Petitioner] asserts that Al-Shaykh's input to "***disable*** the transfer to the playback device" amounts to a set of inputs to "***transfer playback*** from the playback device ***back to the control device***," as recited in claim 6. Petition, 51. However, a POSA would have understood that Al-Shaykh's input to "disable the transfer to the playback device" merely stops the transfer of "media content" from Al-Shaykh's "mobile device" to the "target rendering device," such that the "mobile device" no longer relays the "media content" directly to the "target rendering device" or facilitates the retrieval of "media content." Ex.2018, ¶¶242-43.

Id. In reply, Petitioner contends that "Al-Shaykh discloses this limitation because it discloses invoking media transfer control 51 or control/indication element 71 to disable the transfer of playback to the rendering device and revert playback back to the mobile device." Pet. Reply 23. Petitioner's arguments and evidence on this issue are well-supported by Al-Shaykh

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because media transfer control 51 or control/indication element 71 constitute a set of inputs that are capable of transferring playback from the target rendering device back to the mobile device. Considering the arguments and weighing the evidence, we find that the preponderance of the evidence establishes that all the elements of claim 6 are taught by the cited art. Accordingly, we conclude that claim 6 is unpatentable as obvious in view of (1) a combination of Al-Shaykh and Qureshey; and (2) a combination of Al-Shaykh, Qureshey, and Phillips.
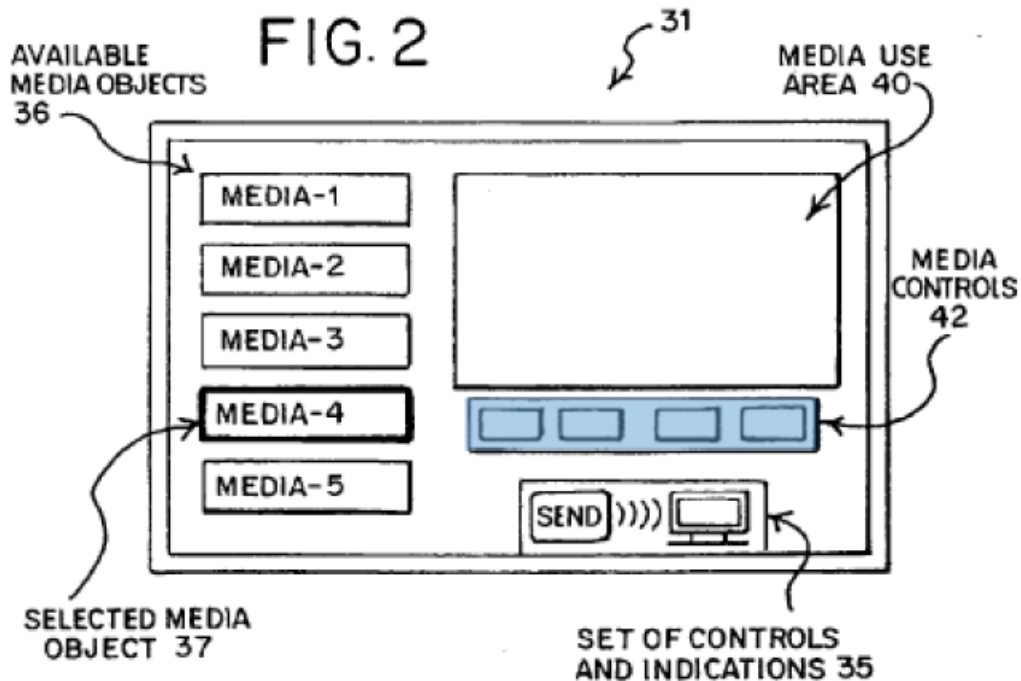
Claim 7

Claim 7 recites:

> 7. *The method of claim 1, wherein causing the graphical interface to display the control interface including one or more transport controls to control playback by the control device comprises causing the graphical interface to display a control interface that includes the one or more transport controls in a particular arrangement on the graphical interface, and wherein modifying the one or more transport controls of the control interface to control playback by the particular playback device comprises causing the graphical interface to display the one or more transport controls to control playback by the particular playback device in the particular arrangement.*

Ex. 1001, 19:9–21.

Petitioner relies on Al-Shaykh for teaching or suggesting all the additional limitations set forth in claim 7. *See* Pet. 52–54 (citing Ex. 1003 (Bims Decl.) ¶¶ 144–147; Ex. 1007 ¶ 92, Fig. 2). In support of its contentions for claim 7, the Petition provides an annotated version of Figure 2 of Al-Shaykh, reproduced below.

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FIG. 2

AVAILABLE MEDIA OBJECTS 36

MEDIA USE AREA 40

31

MEDIA-1

MEDIA-2

MEDIA-3

MEDIA-4

MEDIA-5

MEDIA CONTROLS 42

SEND

SELECTED MEDIA OBJECT 37

SET OF CONTROLS AND INDICATIONS 35

Pet. 53. Figure 2 depicts "a user interface of a media application having a set of controls and indications." Ex. 1007 ¶ 69. The Petition states:

> Al-Shaykh discloses *causing the graphical interface to display the control interface including one or more transport controls to control playback by the control device . . . .* Further, the media controls 42 (i.e., the claimed transport claims) are placed as a module underneath the media use area 40 as shown in Figure 2 and, thus, the media controls 42 are in a particular arrangement.
>
> * * *
>
> Al-Shaykh discloses *modifying the one or more transport controls of the control interface to control playback by the particular playback device* and that the same media controls 42 used to control playback of the mobile device are also used to control playback at the rendering device when playback is transferred to the rendering device. Regardless of what type of playback control is active, the media controls 42 are in the same particular arrangement, as shown by Figure 2.

Pet. 52, 53–54. The cited passages and figure in Al-Shaykh support Petitioner's contentions as to claim 7. Patent Owner does not dispute

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Petitioner's showing as to the additional elements of claim 7. We find that the preponderance of the evidence establishes that all the elements of claim 7 are taught by the cited art. Accordingly, we conclude that claim 7 is unpatentable as obvious in view of (1) a combination of Al-Shaykh and Qureshey; and (2) a combination of Al-Shaykh, Qureshey, and Phillips.

Claim 8

Claim 8 recites:

> 8. *The method of claim 1, wherein causing the one or more first cloud servers to add multimedia content to the local playback queue comprises causing an identifier of the multimedia content to be added to the local playback queue, wherein the identifier indicates a particular source of the multimedia content at the one or more second cloud servers of the streaming content service, wherein the particular playback device receives the multimedia content from the particular source at the one or more second cloud servers of the streaming content service.*

Ex. 1001, 19:22–31.

Petitioner relies on the combination of Al-Shaykh and Qureshey for teaching or suggesting all the additional limitations set forth in claim 8. *See* Pet. 54–55 (citing Ex. 1003 (Bims Decl.) ¶¶ 148–149; Ex. 1008, 10:64–11:2, 14:32–47, Figs. 3A, 6B). The Petition states:

> Qureshey discloses *causing the one or more first cloud servers to add multimedia content to the local playback queue* and *multimedia content at the one or more second cloud servers of the streaming content service . . . . See* Bims, ¶ 148. Qureshey's playlist includes URLs and an identifier that indicates the audio source for the content to be played back. Qureshey, 10:64-11:2, 14:32-47, Figs. 3A, 6B.
>
>   * * *
>
> Al-Shaykh and Qureshey (Grounds I and III) disclose . . . a method, *wherein the particular playback device receives the*

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> *multimedia content from the particular source at the one or
> more second cloud servers of the streaming content service*, as
> recited . . . . Specifically, Qureshey discloses this limitation, as
> explained [above in relation to claim 1] . . . . *See* Bims, ¶ 149.

Pet. 54–55. The cited passages and figures in Qureshey support Petitioner's

contentions as to claim 8. Patent Owner does not dispute Petitioner's

showing as to the additional elements of claim 8. We find that the

preponderance of the evidence establishes that all the elements of claim 8

are taught by the cited art. Accordingly, we conclude that claim 8 is

unpatentable as obvious in view of (1) a combination of Al-Shaykh and

Qureshey; and (2) a combination of Al-Shaykh, Qureshey, and Phillips.

Claim 9

Claim 9 recites:

> 9. *The method of claim 1, wherein causing one or more
> first cloud servers to add the multimedia content to the local
> playback queue on the particular playback device comprises
> sending a message to the streaming content service that
> causes the one or more first cloud servers to add the
> multimedia content to the local playback queue on the
> particular playback device.*

Ex. 1001, 19:32–38.

Petitioner relies on the combination of Al-Shaykh and Qureshey for

teaching or suggesting all the additional limitations set forth in claim 9. *See*

Pet. 55 (citing Ex. 1003 (Bims Decl.) ¶¶ 150–151; Ex. 1007 ¶¶ 6, 90, 95).

The Petition states:

> Al-Shaykh discloses *sending a message to the streaming
> content service.* . . . a user provides a set of inputs to transfer
> playback to the rendering devices. These user inputs are
> provided on a "service-specific application on the mobile
> device," which is associated with the "remote [media] content
> service" disclosed in Al-Shaykh. Al-Shaykh, [0006], [0090],

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> [0095]. Thus, the user inputs result in sending a message to the
> remote content service that is associated with the service-
> specific application. Bims, ¶ 151. . . . the inputs cause the one
> or more first cloud servers to add the multimedia content to the
> local playback queue on the particular playback device in the
> Al-Shaykh-Qureshey combined system.

Pet. 55. The cited passages in Al-Shaykh support Petitioner's contentions as
to claim 9.

Patent Owner argues that Petitioner fails to establish that Al-Shaykh
"teaches the claimed 'message' that is sent from the 'control device' to the
'streaming content service' and 'causes the one or more first cloud servers to
add the multimedia content to the local playback queue on the particular
playback device,' as required by claim 9." PO Resp. 62. Specifically,
Patent Owner argues:

> Simply put, Al-Shaykh discloses three different
> approaches in which "media content" is transferred from a
> "mobile device" to a "target rendering device," and none of
> them involve the message required by claim 9. . . . Ex.2018,
> ¶252. Google's assertion to the contrary is unsupported by Al-
> Shaykh. Petition, 55. Google points to Al-Shaykh's "service-
> specific application on a mobile device" associated with a
> "remote content service," but such general disclosure simply
> does not amount to the specific functionality required by claim
> 9. Ex.2018, ¶¶253-56.

Id. at 63. In reply, Petitioner argues

> [Patent Owner's] only counterargument is that Al-Shaykh's
> "three different approaches" do not disclose the claimed
> "message." POR, 62-63. Not only does this improperly ignore
> critical disclosures of Al-Shaykh . . . but it also fails to
> appreciate that Al-Shaykh discloses receiving inputs at a
> "service-specific application" on the mobile device, which is
> "designed to provide access to media content from one or more

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> associated content services." Pet., 55 (citing Al-Shaykh,
> [0006], [0090], [0095]).

Pet. Reply 24. We agree with Petitioner. Petitioner's arguments and
evidence on this issue are well-supported by Al-Shaykh because it discloses
a service-specific application on the mobile device that is capable of
accessing media content from a remote media content service. Ex. 1007
¶¶ 6, 95. According to Dr. Bim, Al-Shaykh's disclosure of a user interacting
with the service-specific application on the mobile device in order to access
the remote media content service (e.g., a streaming content service) would
include "sending message to the streaming content service." Ex. 1003
¶ 151. We credit this particular testimony because it is consistent with Al-
Shaykh's disclosure. Considering the arguments and weighing the evidence,
we find that the preponderance of the evidence establishes that all the
elements of claim 9 are taught by the cited art. Accordingly, we conclude
that claim 9 is unpatentable as obvious in view of (1) a combination of Al-
Shaykh and Qureshey; and (2) a combination of Al-Shaykh, Qureshey, and
Phillips.

> Claim 10

> Claim 10 recites:

>> 10. *The method of claim 1, wherein detecting the set of*
>> *inputs comprises detecting a selection of the multimedia*
>> *content.*

Ex. 1001, 19:39–41.

Petitioner relies on Al-Shaykh for teaching or suggesting the
additional limitation set forth in claim 10. *See* Pet. 56 (citing Ex. 1003
(Bims Decl.) ¶ 152; Ex. 1007 ¶ 86, Fig. 2). The Petition states:

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> Al-Shaykh discloses a user interface that allows for a user to
> provide a set of inputs . . . . *See* Bims, ¶152. Further, Al-
> Shaykh discloses a user interface 31 that includes available
> media content that a user can select. Al-Shaykh, [0086] ("the
> user interface 31 of the media application may display a
> selected symbolic representation 37 for one or more selected
> media objects."), Fig. 2 (element 36 and element 37). A POSA
> would have understood that a user would select content to play
> before or after selecting a selectable option to transfer playback
> and selecting a particular playback device. Bims, ¶152. Thus,
> Al-Shaykh discloses a set of user inputs that includes a
> selection of media content.

Pet. 56. The cited passages and figure in Al-Shaykh support Petitioner's

contentions as to claim 10. Patent Owner does not dispute Petitioner's

showing as to the additional elements of claim 10. We find that the

preponderance of the evidence establishes that all the elements of claim 10

are taught by the cited art. Accordingly, we conclude that claim 10 is

unpatentable as obvious in view of (1) a combination of Al-Shaykh and

Qureshey; and (2) a combination of Al-Shaykh, Qureshey, and Phillips.

Claim 11

Claim 11 recites:

> 11. *The method of claim 1, wherein detecting the set of*
> *inputs comprises detecting an input that causes playback at*
> *the control device to be stopped.*

Ex. 1001, 19:42–44.

Petitioner relies on Al-Shaykh for teaching or suggesting the

additional limitation set forth in claim 11. *See* Pet. 56–57 (citing Ex. 1003

(Bims Decl.) ¶ 153; Ex. 1007 ¶ 92). The Petition states:

> Al-Shaykh discloses a user interface that allows for a user to
> provide a set of inputs. . . . Further, Al-Shaykh discloses media
> controls 42 that include a "pause" control to stop playback of

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content. Al-Shaykh, [0092]. These media controls control playback of content at the mobile device. . . . A POSA would understand that a user may pause content before or after selecting a selectable option to transfer playback and selecting a particular playback device. Bims, ¶153. Thus, Al-Shaykh discloses a set of user inputs that includes a selection of media content.

Pet. 56–57. The cited passage in Al-Shaykh support Petitioner's contentions as to claim 11.

Patent Owner argues that "[Petitioner]'s assertion that "a user may pause content… *after* selecting a selectable option to transfer playback and selecting a particular playback device" (Petition, 56-57) does not satisfy claim 11." PO Resp. 63. In reply, Petitioner argues that "Al-Shaykh discloses media controls 42 with a 'pause' control to stop playback at the mobile device, which [Patent Owner] admits can occur." Pet. Reply 24. Petitioner's arguments and evidence on this issue are well-supported by Al-Shaykh. Patent Owner's argument to contrary is predicated on incorrect interpretation of paragraph 132 of Al-Shaykh, which we addressed above with respect to limitations 1-e and 1-g. *See* Ex. 1007 ¶ 132. Considering the arguments and weighing the evidence, we find that the preponderance of the evidence establishes that all the elements of claim 11 are taught by the cited art. Accordingly, we conclude that claim 11 is unpatentable as obvious in view of (1) a combination of Al-Shaykh and Qureshey; and (2) a combination of Al-Shaykh, Qureshey, and Phillips.

Claim 12

Claim 12 recites:

12. *The method of claim 1, wherein detecting the set of 45 inputs comprises detecting selection of a button on the*

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> *control interface.*

Ex. 1001, 19:45–47.

Petitioner relies on Al-Shaykh for teaching or suggesting the additional limitation set forth in claim 12. *See* Pet. 57 (citing Ex. 1003 (Bims Decl.) ¶¶154–155; Ex. 1007 ¶¶ 107, 121). The Petition states, "Al-Shaykh discloses detecting a set of inputs. . . . Further, Al-Shaykh discloses that the media transfer control 51 or control/indication element 71 'may be presented as a touchable button' that is selected to transfer playback." Pet. 57. The cited passages in Al-Shaykh support Petitioner's contentions as to claim 12. Patent Owner does not dispute Petitioner's showing as to the additional elements of claim 12. We find that the preponderance of the evidence establishes that all the elements of claim 12 are taught by the cited art. Accordingly, we conclude that claim 12 is unpatentable as obvious in view of (1) a combination of Al-Shaykh and Qureshey; and (2) a combination of Al-Shaykh, Qureshey, and Phillips.

Claims 18–24 and 27–29

The Petition states, "[c]laims 18-24 are substantively identical to claims 6-12, respectively, and the prior art references teach claims 18-24 for the reasons discussed above," and "[c]laims 27-29 are substantively identical to claims 10-12, respectively, and the prior art references teach claims 27-29 for the reasons discussed above. Pet. 57 (citing Ex. 1003 (Bims Decl.) ¶156). Patent Owner also relies on its arguments for claims 6–12 to rebut Petitioner's explanation and supporting evidence for claims 18–24 and 27–29. PO Resp. 63. For the reasons discussed above with regard to claims 6–12, we find that the preponderance of the evidence establishes that all the elements of claims 18–24 and 27–29 are taught by the cited art.

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Accordingly, we conclude that claims 18–24 and 27–29 are unpatentable as obvious in view of (1) a combination of Al-Shaykh and Qureshey; and (2) a combination of Al-Shaykh, Qureshey, and Phillips.

F.   Obviousness of Claims 2 and 14

Petitioner contends that dependent claims 2 and 14 of the '615 patent are unpatentable as obvious over the combined teachings of (1) Al-Shaykh, Qureshey, and Ramsay and (2) Al-Shaykh, Qureshey, Phillips, and Ramsay. Pet. 57–69. Our analysis of these challenges to claims 2 and 14 is set forth below.

Claim 2

Claim 2 recites:

> 2. *The method of claim 1, wherein detecting the set of inputs to transfer playback from the control device to the particular playback device comprises detecting a set of inputs to transfer playback from the control device to a particular zone of a media playback system that includes the particular playback device as a first channel of a stereo pair and an additional playback device as a second channel of the stereo pair, wherein modifying the one or more transport controls of the control interface to control playback by the particular playback device comprises causing the one or more transport controls of the control interface to control playback by the particular playback device and the additional playback device, and wherein the particular playback device playing back the retrieved multimedia content comprises the particular playback device and the additional playback device playing back the multimedia content as the stereo pair.*

Ex. 1001, 18:13–29. Claim 14 is substantively identical to claim 2. *See id.* at 20:28–44; *see also* Pet. 69 ("Claim[ ] 14 is substantively identical to claim 2.").[16]

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[16] While not directly addressing whether claims 2 and 14 are substantively identical, Patent Owner presents its arguments regarding these claims

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Petitioner relies on Ramsay for teaching or suggesting all the additional limitations set forth in claim 2. *See* Pet. 64–69 (citing Ex. 1003 (Bims Decl.) ¶¶ 173–180; Ex. 1009, 4:59–5:62, 11:38–47, 18:29–41, 22:25–63, Figs. 1, 4B, 17). The Petition states:

> Ramsay discloses a personal computer that controls playback at a "wireless speaker set 101c" that includes two individually controllable wireless speakers and is within a networked playback system. The speaker set "operate[es] as a stereo pair (i.e. one speaker renders and plays back a left channel signal, the other a right channel signal)." The speaker set can be within a particular zone, such as a bedroom. Pet. 65 (citing Ex. 1003 (Bims Decl.) ¶¶ 173–175; Ex. 1009, 4:59–5:62, 22:25–63, Figs. 1, 17).

> * * *

> Ramsay's wireless speaker set is a particular zone within a media playback system, wherein the zone includes two playback devices that act as a stereo pair. Further, a POSA would have been motivated to and would have found it obvious to replace Al-Shaykh's rendering devices with Ramsay's wireless speaker sets and zones. *Id.* at 66 (citing Ex. 1003 (Bims Decl.) ¶ 175).

> * * *

> Ramsay discloses adjusting playback controls 400 that are found on Ramsay's control interface in a manner that controls both speakers in the wireless speaker set. *Id.* at 67 (citing Ex. 1003 (Bims Decl.) ¶¶ 176–178; Ex. 1009, 11:38-47 ("region 411 allows a user to select between one or more available groups, zones and/or individual speakers to control … the control interface under consideration is able to be used to control a plurality of speakers/groups/zones, a by way of region 411 the user is able to select which of those is to be controlled at a given time"), 18:29-41, Fig. 4B).

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together. *See* PO Resp. 64–67. And, neither party has suggested to us any material differences between claims 2 and 14 that are relevant to our analysis. *See* Pet. 64–69; PO Resp. 64–67.

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* * *

> [A] POSA would have been motivated to and would have found
> it obvious to replace Al-Shaykh's rendering devices with
> Ramsay's wireless speaker sets and zones. *Id.* at 67, 69 (citing
> Ex. 1003 (Bims Decl.) ¶ 178–180).

Pet. 65–68. The cited passages in Ramsay support Petitioner's contentions
as to claim 2.

Patent Owner relies on its arguments previously presented and
discussed above with respect to claim 1 in contending that Ramsay does not
teach or suggest all the limitations recited in claim 2. *See* PO Resp. 67–68.
For the same reasons discussed above with respect to claim 1, these
arguments fail.

Petitioner further contends that "[a] POSA would have been
motivated to and would have found it obvious to replace Al-Shaykh's
rendering devices with Ramsay's wireless speaker sets (e.g., stereo pairs)
and speaker zones (Pet. 61 (citing Ex. 1003 (Bims Decl.), ¶¶ 168-172)),
because:

> Al-Shaykh and Ramsay are in the same field of endeavor,
> deal with similar devices, and are directed to solving the same
> problems in those devices. *Id.* at 61 (citing Ex. 1003 (Bims
> Decl.) ¶ 169; Ex. 1007 ¶¶ 2, 85, 88; Ex. 1009, code (57)
> (Abstract), 1:6–17, 5:61–6:47, 11:37–47, 20:8–19, 22:25–63,
> Figs. 4B, 11).
> * * *
> [B]oth references enable users to control playback to various
> devices and playback content on those devices. Ramsay further
> discloses its wireless speakers to have storage space to upload
> information onto the speakers, such as relevant files. Thus,
> Ramsay is compatible with the functionality added from
> Qureshey to Al-Shaykh's system. *Id.* at 62 (citing Ex. 1009,
> 9:14-42).
> * * *

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Both Al-Shaykh and Ramsay describe networked media playback systems that include a control device and one or more rendering devices. *Id.* (citing Ex. 1003 (Bims Decl.) ¶ 170; Ex. 1007 ¶ 78, Fig. 1 (showing mobile device 11 and rendering devices 21, 22, 22, 23 in home network 20); Ex. 1009, Figs. 1, 2A, 2B, 2C (showing a wireless web-enabled control device 108 and wireless speaker set 101c comprised of wireless speakers 101a and 101b).4B, 11)).

* * *

Al-Shaykh and Ramsay involve similar media playback systems that are often used in homes or offices and allow users the flexibility of playing content on various device configurations for different scenarios. Ramsay describes additional configuration options for a user to choose from, such as playing back content on a set of speakers that act as a stereo pair or across multiple speaker zones in a house. Qureshey also describes similar systems and devices. *Id.* at 62–63 (citing Ex. 1003 (Bims Decl.) ¶ 169; Ex. 1007 ¶¶ 5 ("the user may render the music content on a high quality stereo in the home instead of being limited to playback using the mobile device."); Ex. 1009, 5:61-62, 6:30-47, 11:37-47, 20:8-19, 22:25-64, Fig. 4B, 11, 17).

* * *

Al-Shaykh and Ramsay disclose methods to allow users enhanced flexibility to control playback at playback devices in desired arrangements or configurations that can provide, for example, higher quality playback or playback across regions in synchrony. Ramsay provides additional flexibility to allow users to control playback on a set of stereo speakers, which provide an immersive music experience and surround sound capability. Alternatively, Ramsay also allows users the flexibility to control playback on speakers in different zones in a house, which increases the playback coverage to the user's desire. *Id.* at 63–64 (citing Ex. 1003 (Bims Decl.) ¶¶ 171–172; Ex. 1007 ¶¶ 53, 138; Ex. 1009, 5:61–62, 6:30-47, 11:37–47, 20:8–19, 22:25–63, Figs. 4B, 11, 17).

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Pet. 61–64. The Petition clearly articulates why a skilled artisan would have been motivated to combine the relevant teachings of Al-Shaykh and Ramsay by providing specific reasoning based on facts in the record and logic.

Patent Owner presents many of the same arguments against the combinations asserted with respect to claims 2 and 14 as it presented against the combinations asserted for the other challenged claims. We again find these arguments not to be as persuasive as Petitioner's multi-faceted and well-supported contentions as to why there exists a motivation to combine Al-Shaykh and Ramsay.

Patent Owner also argues that "Al-Shaykh and Ramsay are directed toward solving *different* problems involving fundamentally different technologies." PO Resp. 64 (citing Ex. 2018 (Schmidt Decl.) ¶ 294). In support, the Patent Owner contends:

> Al-Shaykh is generally directed to "transferring media content" from a "mobile device" to a single "rendering device." Ex.1007, ¶¶7, 77. On the other hand, Ramsay does not contemplate "transferring" media content from one device to another. Ex.2018, ¶294. Instead, Ramsay focuses on providing a "control interface" and implementing "playback control commands" for a "networked media playback device" or a "networked media playback system." *Id.*

Id. at 64–65. Considering the competing contentions of the parties, we find that Petitioner's contentions are better supported by the cited art. Patent Owner's contentions that Al-Shaykh and Ramsay are directed toward solving different problems and involve fundamentally different technologies are not well-supported or persuasive. While, in contrast, Petitioner's contentions that these references deal with similar devices and are directed to solving the same problems in those devices are well-supported and

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convincing. As one example, Al-Shaykh and Ramsey appear to address similar technology because each reference enables users to control playback to various devices. *Compare* Ex. 1007 ¶ 2, *with* Ex. 1009, 1:7–13.

And, the remainder of Patent Owner's arguments raise concerns regarding the combination of the particular elements and functionality of the cited art together into a single device. *See* PO Resp. 65–67. But the proper test is not whether the devices disclosed in the cited art may be bodily incorporated, but whether the claimed inventions would have been rendered obvious by the teachings of the cited art. *Allied Erecting & Dismantling Co. v. Genesis Attachments, LLC*, 825 F.3d 1373, 1381 (Fed. Cir. 2016).

For the reasons discussed above, we find that a skilled artisan would have been motivated to combine the relevant teachings of (1) Al-Shaykh, Qureshey, and Ramsay; and (2) Al-Shaykh, Qureshey, Phillips, and Ramsay. We also find that the preponderance of the evidence establishes that all the elements of claims 2 and 14 are taught by the cited art. Accordingly, we conclude that claims 2 and 14 are unpatentable as obvious in view of (1) a combination of Al-Shaykh, Qureshey, and Ramsay; and (2) a combination of Al-Shaykh, Qureshey, Phillips, and Ramsay.

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III.   CONCLUSION[17]

Petitioner has demonstrated by a preponderance of the evidence that claims 1, 2, 6–14, 18–25, and 27–29 of the '615 patent are unpatentable. A summary of our conclusions is set forth in the table below.

Claims	35 U.S.C. §	Reference(s)/Basis	Claims Shown Unpatentable	Claims Not shown Unpatentable
1, 6–13, 18–25, 27–29	103(a)	Al-Shakayh, Qureshey	1, 6–13, 18–25, 27–29	
1, 6–13, 18–25, 27–29	103(a)	Al-Shakayh, Qureshey, Phillips	1, 6–13, 18–25, 27–29	
2, 14	103(a)	Al-Shakayh, Qureshey, Ramsay	2, 14	
2, 14	103(a)	Al-Shakayh, Qureshey, Phillips, Ramsay	2, 14	
Overall Outcome			1, 2, 6–14, 18–25, 27–29	

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[17] Should Patent Owner wish to pursue amendment of the challenged claims in a reissue or reexamination proceeding subsequent to the issuance of this decision, we draw Patent Owner's attention to the April 2019 *Notice Regarding Options for Amendments by Patent Owner Through Reissue or Reexamination During a Pending AIA Trial Proceeding. See* 84 Fed. Reg. 16,654 (Apr. 22, 2019). If Patent Owner chooses to file a reissue application or a request for reexamination of the challenged patent, we remind Patent Owner of its continuing obligation to notify the Board of any such related matters in updated mandatory notices. *See* 37 C.F.R. § 42.8(a)(3), (b)(2).

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IV.   ORDER

In consideration of the foregoing, it is

ORDERED that claims 1, 2, 6–14, 18–25, and 27–29 of U.S. Patent No. 9,967,615 B2 are held to be unpatentable; and

FURTHER ORDERED that, because this is a Final Written Decision, parties to this proceeding seeking judicial review of our decision must comply with the notice and service requirements of 37 C.F.R. § 90.2.

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